



OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH

# A Systems Thinking Approach to Teen Pregnancy Prevention

U.S. Department of Health and Human Services  
Office of the Assistant Secretary for Health  
Office of Population Affairs

February 27, 2020, 2-3 pm ET



# Introductory Webinars from OPA

- **Inspiration, Ideation, Implementation: The Power of Design Thinking in Teen Pregnancy Prevention Webinar**  
*Wednesday, February 26, 2020, 2:00-3:00 pm ET*
- **A Systems Thinking Approach to Teen Pregnancy Prevention Webinar**  
*Thursday, February 27, 2020, 2:00-3:00 pm ET*
- **Youth Engagement Matters: The Power of Youth Voice in Teen Pregnancy Prevention Webinar**  
*Monday, March 2, 2020, 2:00-3:00 pm ET*

More information about each webinar is available on the OPA website:  
[hhs.gov/ash/oah/grant-programs/funding-opportunities/index.html](https://hhs.gov/ash/oah/grant-programs/funding-opportunities/index.html)



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## Important Note:

- We will **not** answer any question related to open funding opportunity announcements during these webinars
- Any questions about open FOAs should be directed to OPA and/or OASH Office of Grants Management



# A Systems Thinking Approach to Teen Pregnancy Prevention

Sheri Marlin, M.Ed.  
Chief Learning Officer  
The Waters Center for Systems Thinking



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# What do you see?



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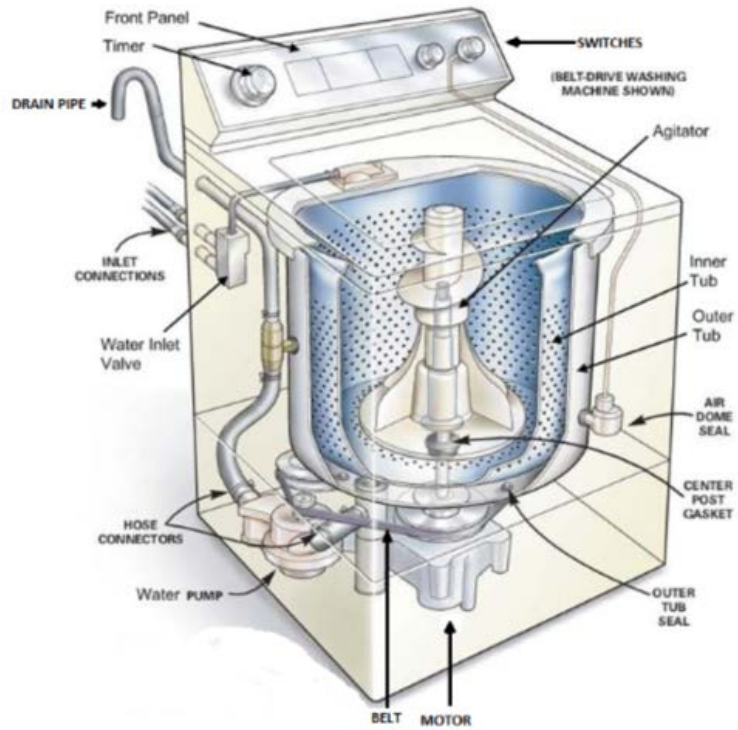
# What do you see now?



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# What is a system?



# What is Systems Thinking?

Systems thinking is a way of seeing the world that focuses on relationships that exist between system parts.

The structures that define the relationships determine the behavior of the system.

The behaviors of systems are viewed as patterns or trends that unfold over time versus a series of discrete events.

It is a way of thinking and a language for describing how things work.





# Characteristics of Systems

- Parts
- Relationships
- Dynamics
- Goals



A system is a collection of elements that interact with each other over time to function as a whole.

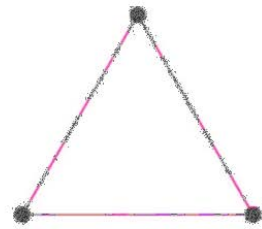


## Poll Question 1

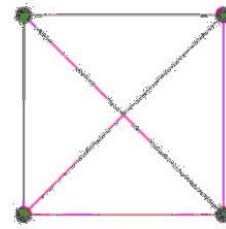
What are some of the key elements of the system you work in with respect to teen pregnancy prevention?



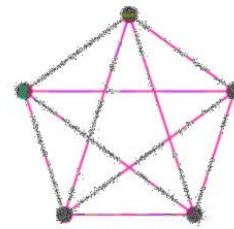
# Levels of System Complexity



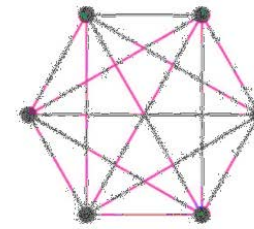
3 people, 3 lines



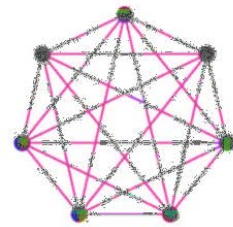
4 people, 6 lines



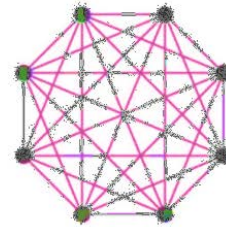
5 people, 10 lines



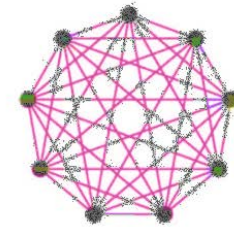
6 people, 15 lines



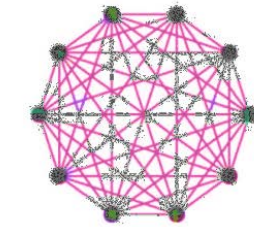
7 people, 21 lines



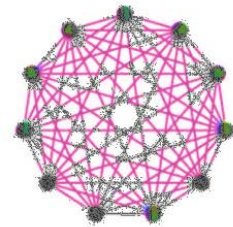
8 people, 28 lines



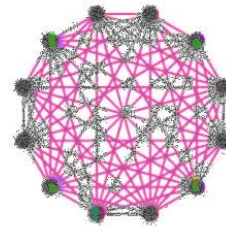
9 people, 36 lines



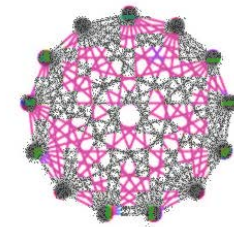
10 people, 45 lines



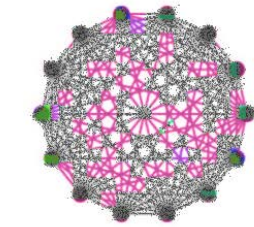
11 people, 55 lines



12 people, 66 lines



13 people, 78 lines



14 people, 91 lines



## Poll Question 2

What are some of the important goals of your teen pregnancy prevention efforts?



# What is a ... ?

## Farmer



## Teacher



# What is a Systems Thinker

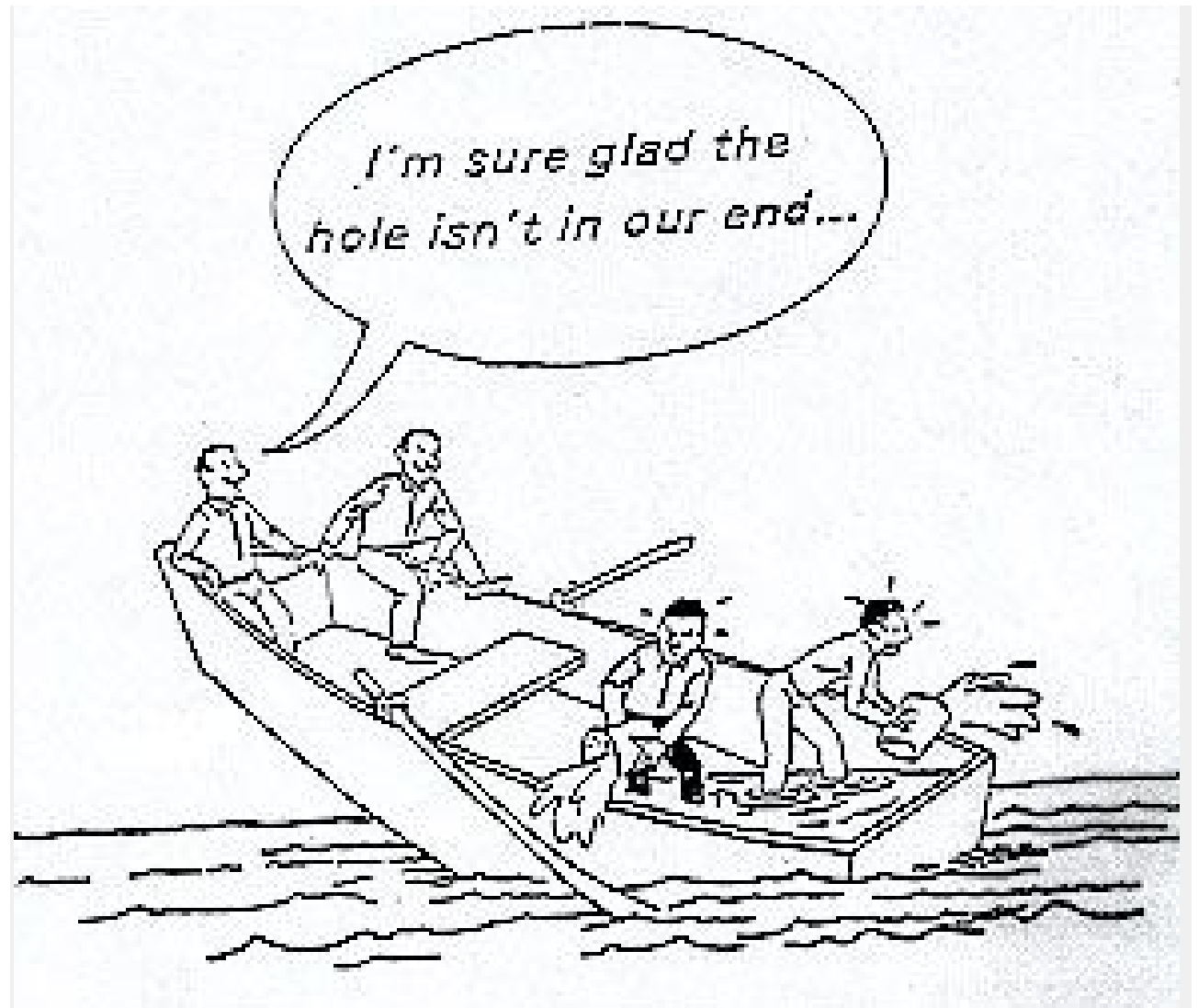
## Habits of a Systems Thinker

- Seeks to understand the big picture
- Observes how elements within systems change over time, generating patterns and trends
- Recognizes that a system's structure generates its behavior
- Pays attention to accumulations and their rates of change
- Makes meaningful connections within and between systems
- Identifies the circular nature of complex cause and effect relationships
- Changes perspectives to increase understanding
- Surfaces and tests assumptions
- Considers an issue fully and resists the urge to come to a quick conclusion
- Considers how mental models affect current reality and the future
- Uses understanding of system structure to identify possible leverage actions
- Considers short-term, long-term and unintended consequences of actions
- Recognizes the impact of time delays when exploring cause and effect relationships
- Checks results and changes actions if needed: “successive approximation”

Source: [www.watersfoundation.org/webed/mod2/downloads/habits.pdf](http://www.watersfoundation.org/webed/mod2/downloads/habits.pdf)



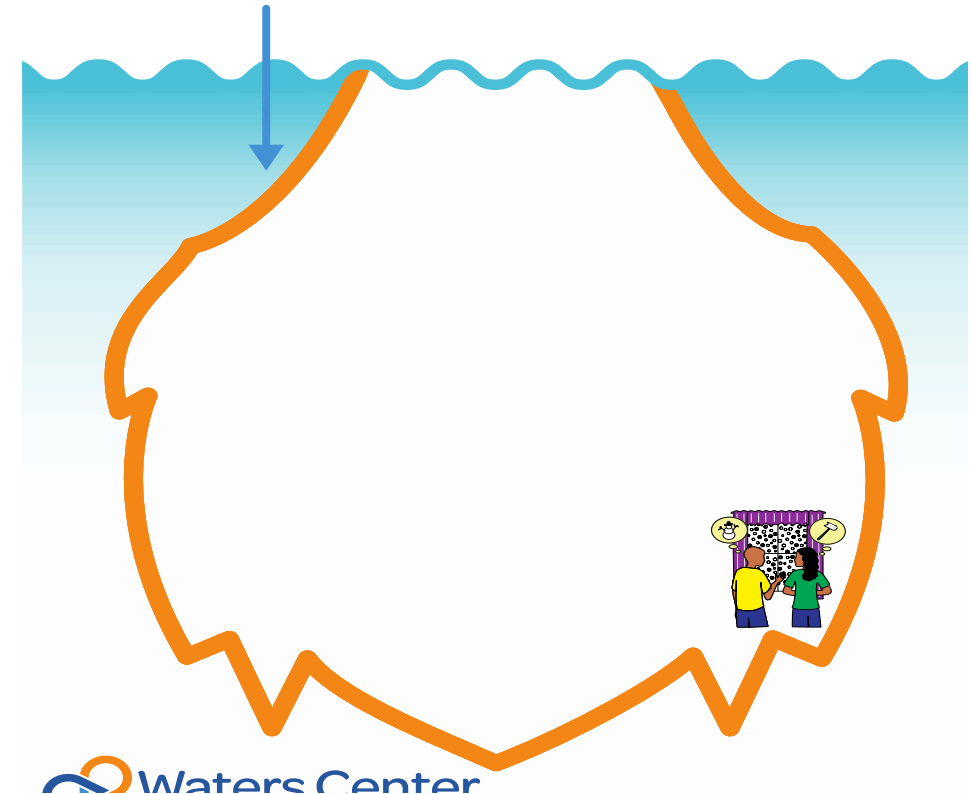
# The Importance of a System View



# The Iceberg Tool

“Be as honest as you possibly can about your current reality and as clear as you possibly can about your desired results.”

-Peter Senge



es, Inc.



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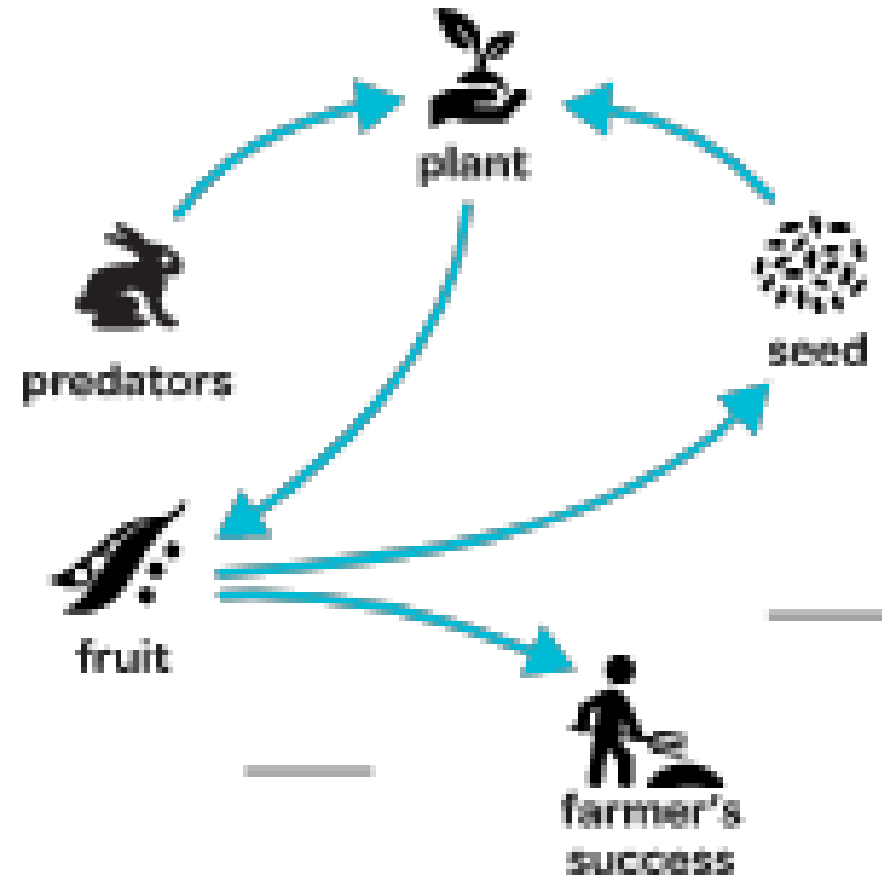
# Habits We Will Focus on in This Webinar

- Observes how elements within systems change over time, generating patterns and trends
- Recognizes that a system's structure generates its behavior
- Makes meaningful connections within and between systems
- Identifies the circular nature of complex cause and effect relationships
- Considers how mental models affect current reality and the future
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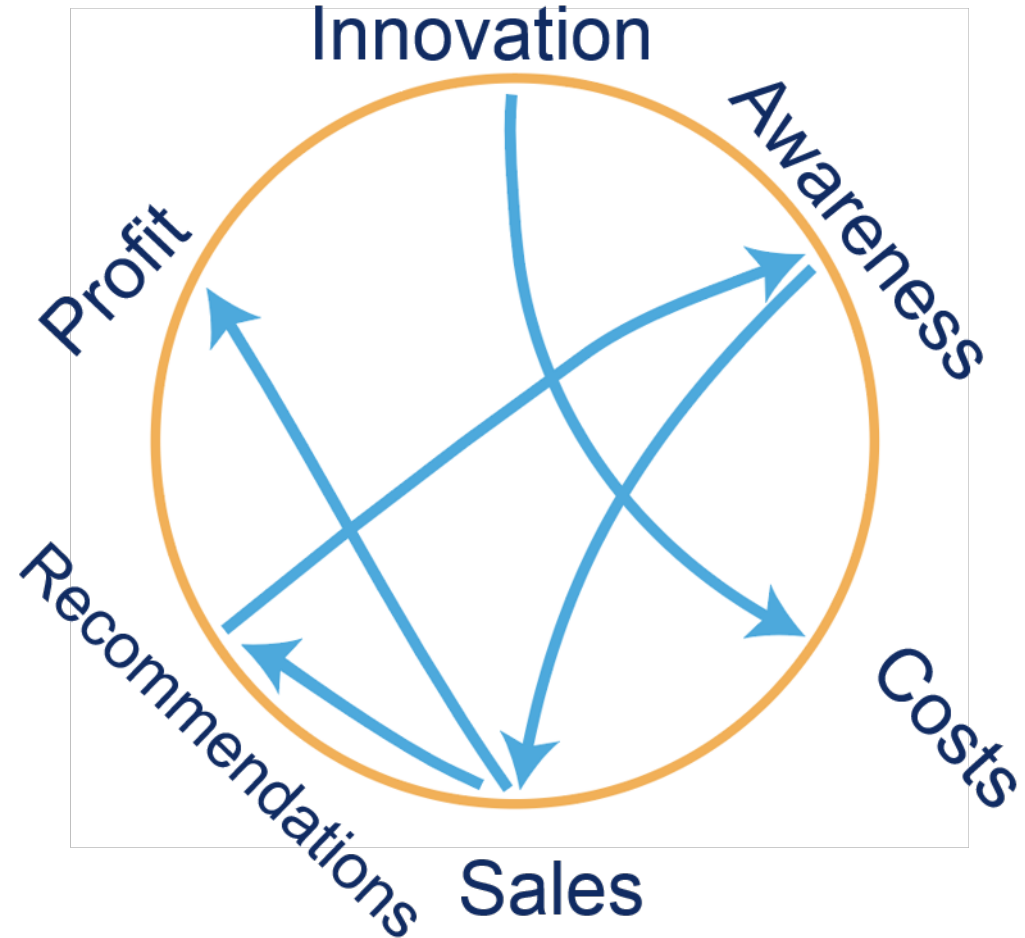
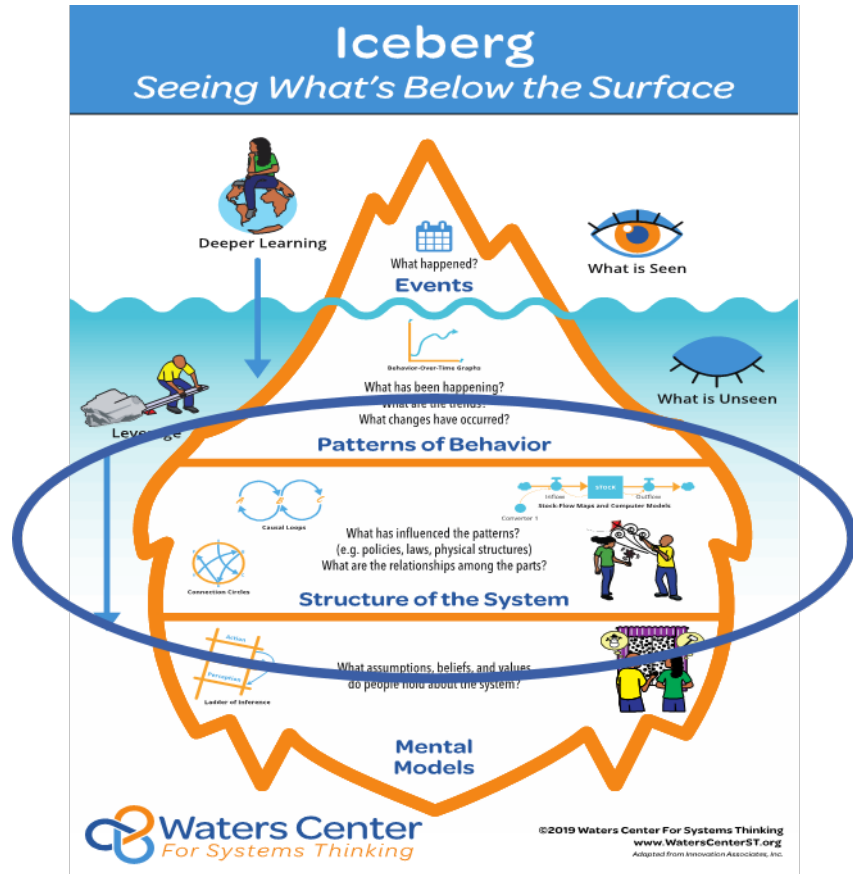
Source: [www.watersfoundation.org/webed/mod2/downloads/habits.pdf](http://www.watersfoundation.org/webed/mod2/downloads/habits.pdf)



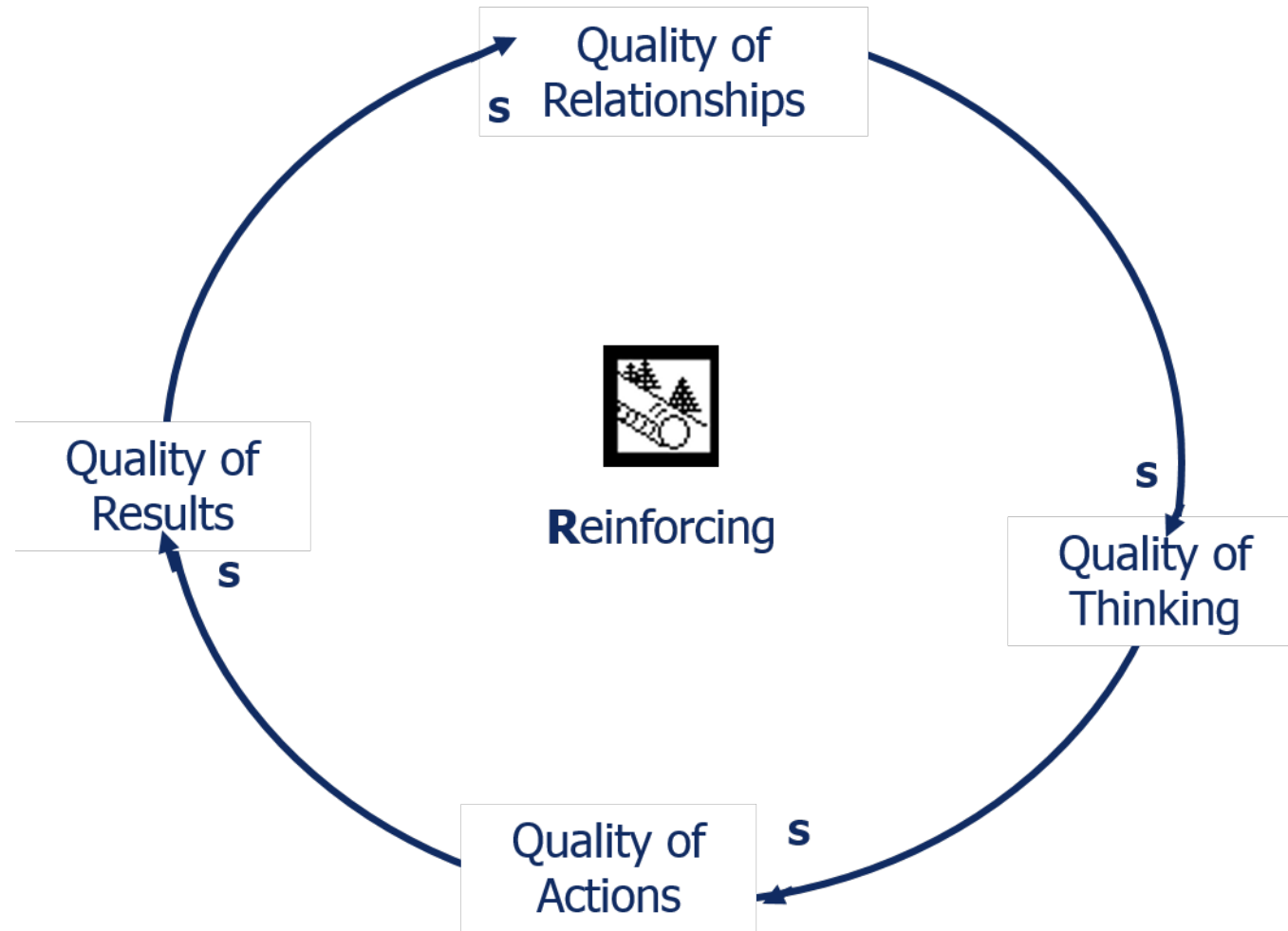
# Makes Meaningful Connections Within and Between Systems



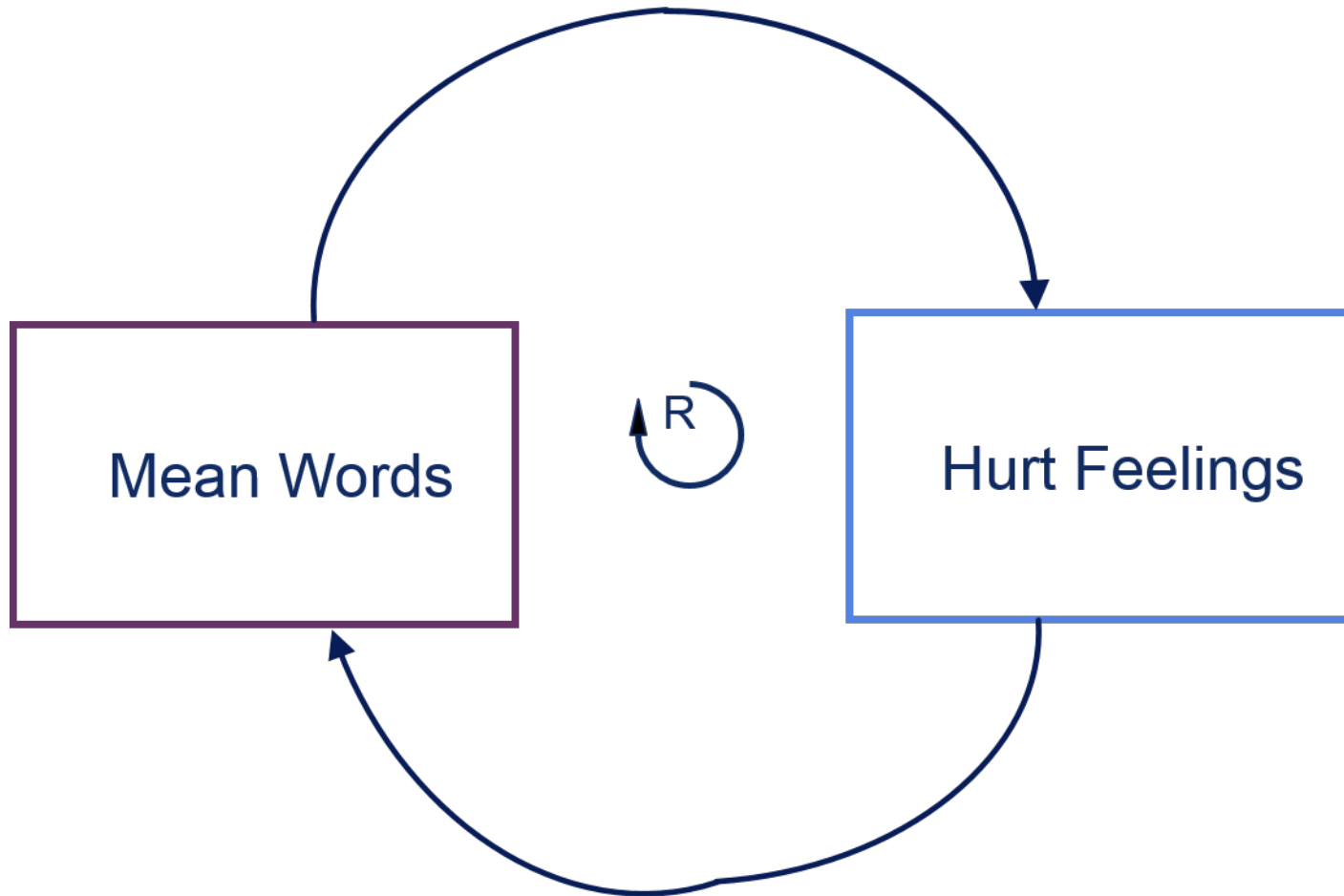
# Makes Meaningful Connections Within and Between Systems (con't)



# Core Theory of Success



# Reinforcing Feedback (Video)



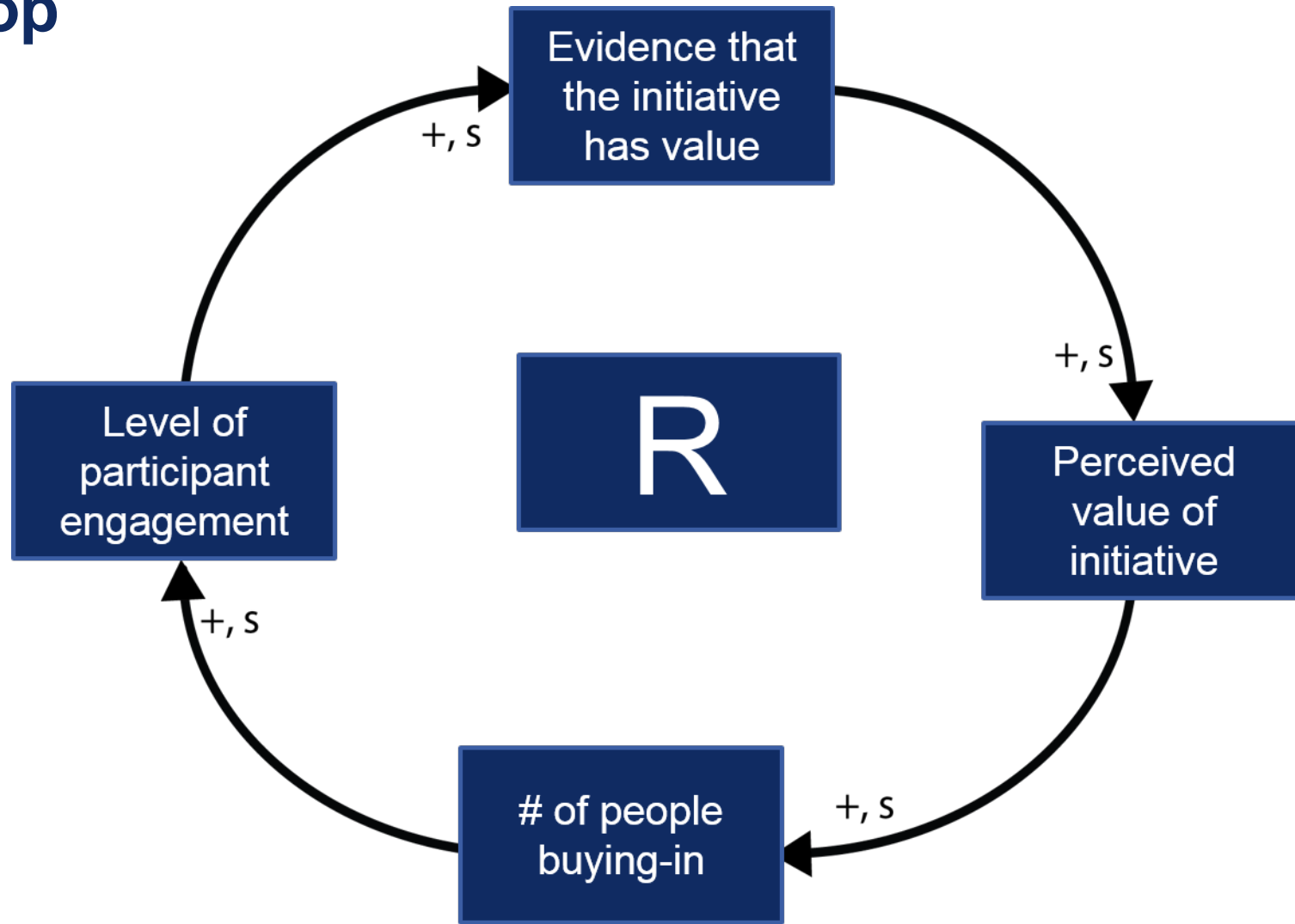
Video: [youtube.com/watch?v=wI03wmG9Ghk](https://www.youtube.com/watch?v=wI03wmG9Ghk)



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# Buy-in Loop



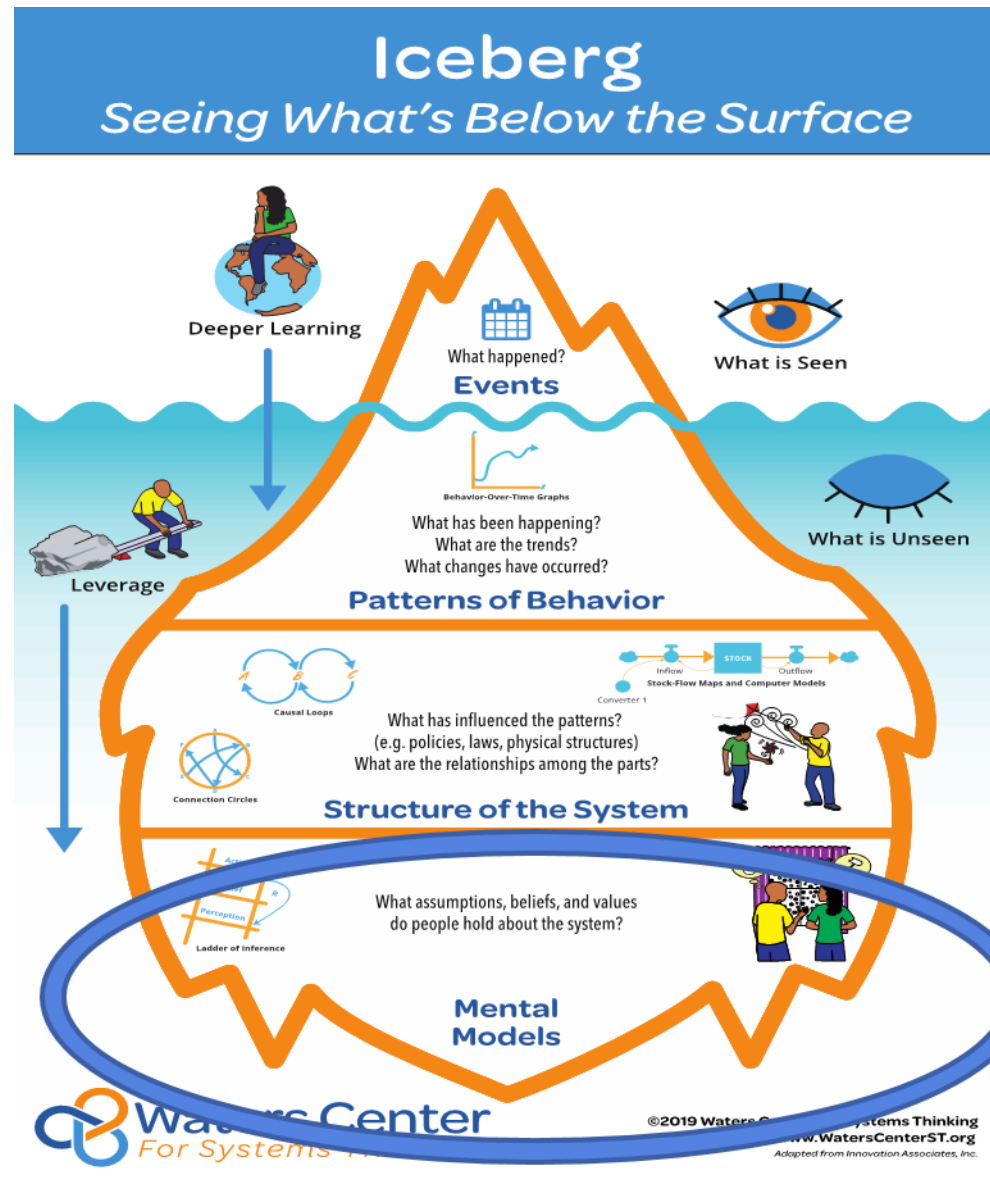
# Your System

Your system... any system is perfectly designed to produce the results you are obtaining.

(Adapted from Carr, 2008)



# Creating Meaningful Change

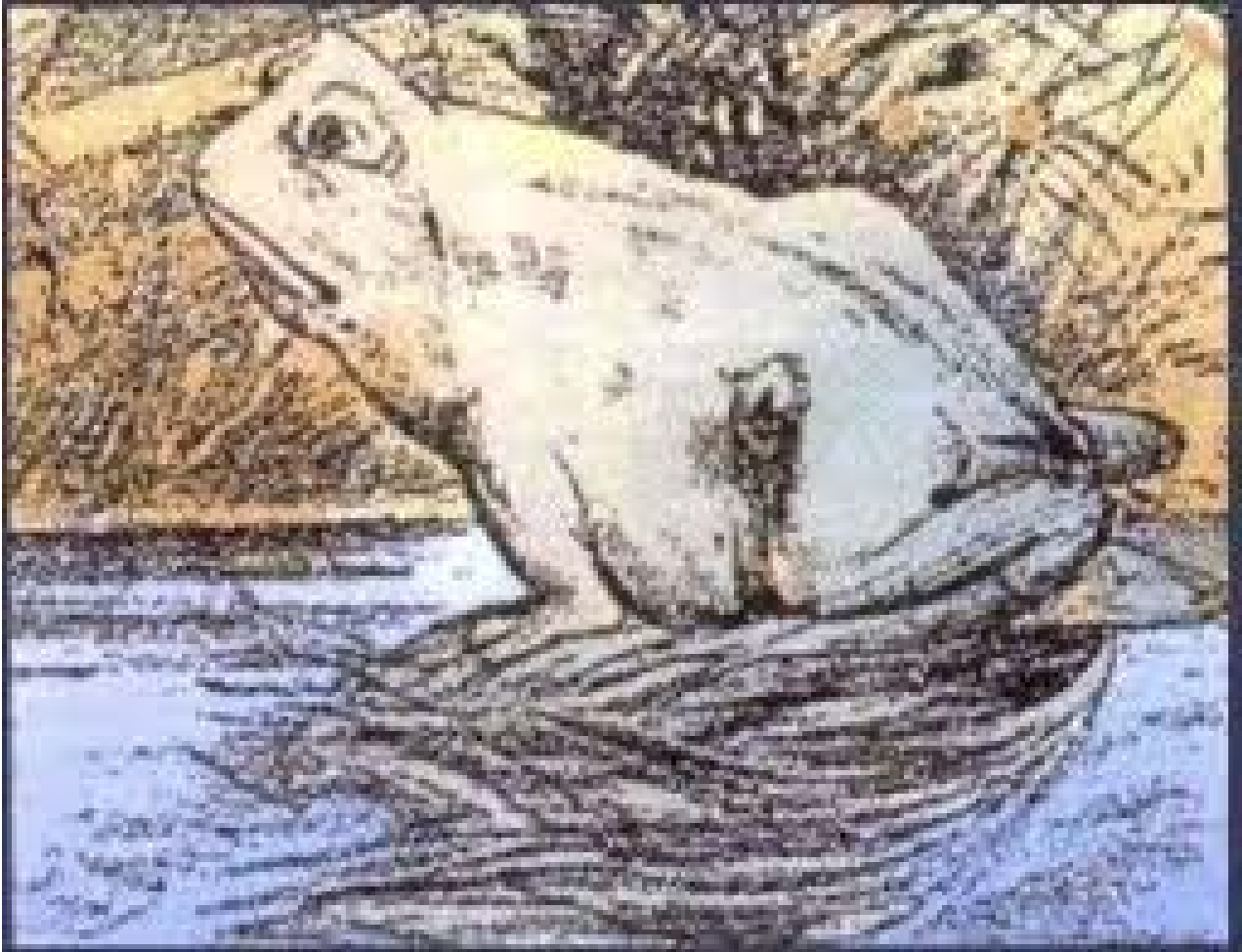


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**What do you see?**



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# Mental Models

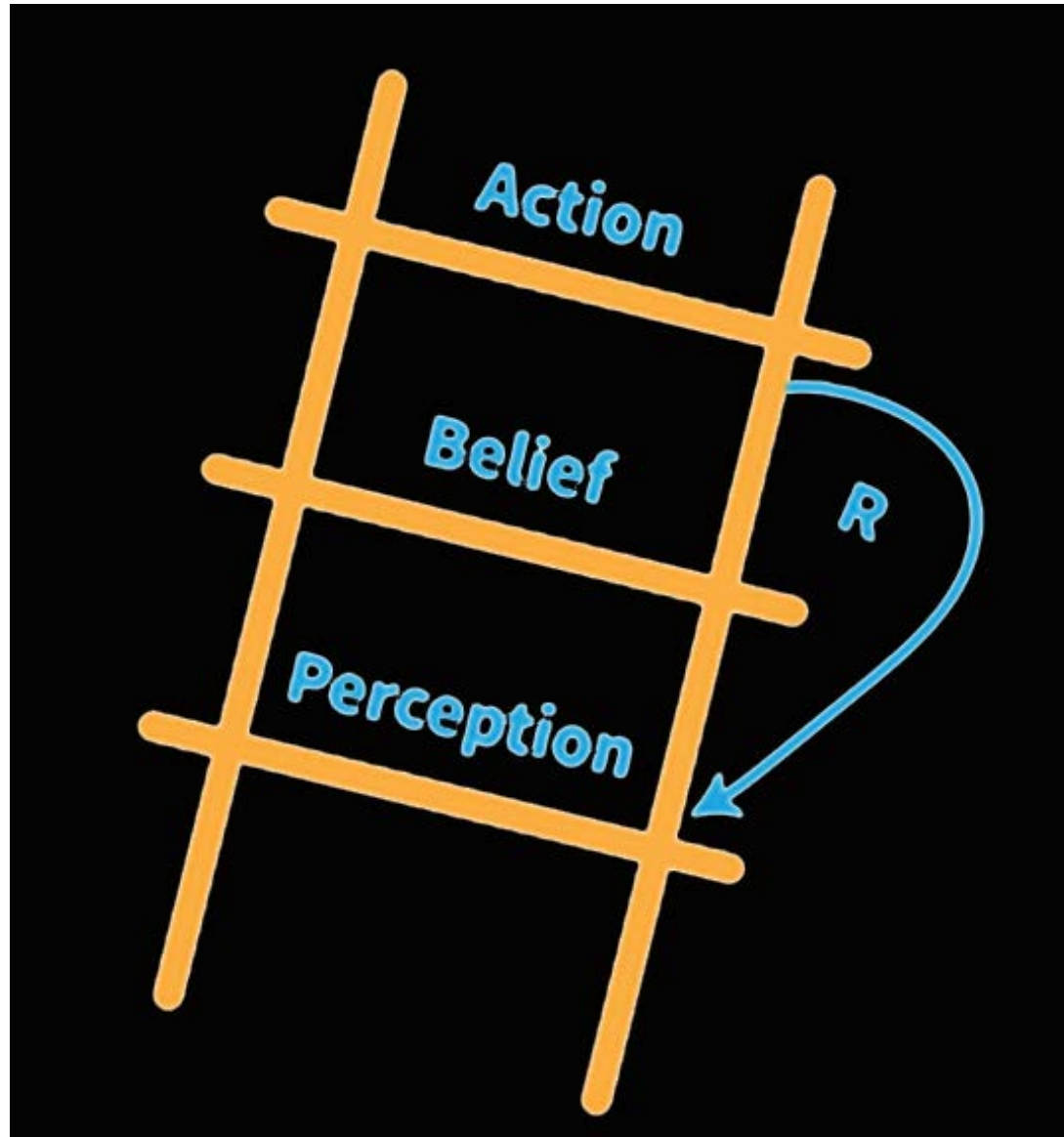
Mental models are deeply held beliefs, assumptions, generalizations, or even images that influence how we understand the world and how we take action.

Peter Senge

---and often the highest forms of leverage in the system



# Ladder of Inference



# What habits will be most important to you going forward?

## Habits of a Systems Thinker

- Seeks to understand the big picture
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Source: [watersfoundation.org/webed/mod2/downloads/habits.pdf](https://watersfoundation.org/webed/mod2/downloads/habits.pdf)



## More Information

- [thesystemsthinker.com](http://thesystemsthinker.com)
- *The Habit-forming Guide to Becoming a Systems Thinker* by Tracy Benson and Sheri Marlin
- [Thinkingtoolsstudio.org](http://Thinkingtoolsstudio.org)
- [WatersCenterST.org](http://WatersCenterST.org)



# Current OPA Funding Opportunity Announcements (FOAs)

- Optimally Changing the Map of Teen Pregnancy through Replication of Programs Proven Effective (Tier 1) (AH-TP1-20-001)
- Teen Pregnancy Prevention (Tier 2) - Phase II Rigorous Evaluation of Promising Interventions (AH-TP2-20-001)
- Innovation and Impact Network Grants (Tier 2) – Achieving Optimal Health and Preventing Teen Pregnancy in Key Priority Areas (AH-TP2-20-002)

Find FOAs and FAQs at: [hhs.gov/ash/oah/resources-and-publications/webinars.html](https://hhs.gov/ash/oah/resources-and-publications/webinars.html)



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