



# UConn TAB Presents

## ENVIRONMENTAL COMMUNICATION STRATEGIES FOR DEVELOPING HEALTH LITERACY

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June 18, 2025



**Commonly Seen:  
Do People Talk  
About Them?**





# Commonly Seen: How Do We Tell Others About Them?



# Environmental Health Risks

## Brownfields Risk Sources:

- industrial production
- commercial and residential activity
- transportation and goods movements

## Brownfields Site Risks:

- Biological dangers
- Physical dangers
- Chemical dangers

## Environmental Health Risks

- Soil and groundwater contamination
- Migration of contaminants
- Emissions deposited
- Wastes dumped on-site or hazards contribute to risks



# Safety and Contamination Risks

## Safety Risks

Sites with safety risks may include:

- Abandoned and derelict structures
- Open foundations and operating electricity at structures
- Deteriorating infrastructure or equipment due to lack of maintenance or vandalism
- Illegal or criminal activity associated with abandoned sites
- Improper waste disposal or dumping
- Abandoned mines and mine waste piles



## Cross-Contamination Risks

Brownfield sites in or near the areas below can potentially spread contaminants and cause structural deterioration

- flood zones
- vulnerable coastal
- drought hazard
- wildfire-risk areas
- natural hazard areas





# Environmental Health Literacy (EHL)

## Centers for Disease Control and Prevention:

Personal health literacy is the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

## Network of the National Library of Medicine:

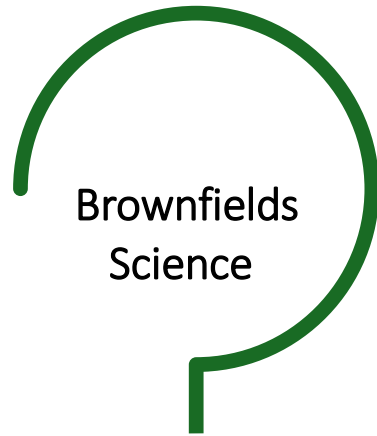
Drawing from such fields as communication, education, and participatory research, EHL provides a bidirectional evaluation tool that respects local context while also building community and research capacity.

## Functions of EHL:

Translating environmental health knowledge into individual and community agency is the foundation for empowering self- and collective efficacy to develop positive social action and community resilience to create and maintain a sustainable and livable community.



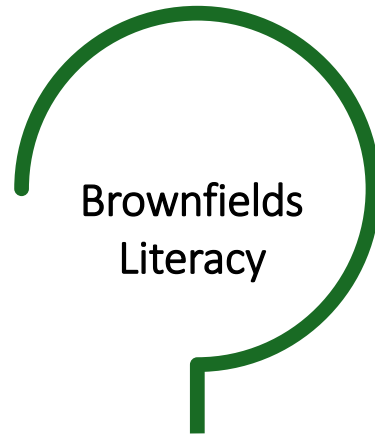
# Translating Brownfields Science Into Literacy



Brownfields  
Science

Scientific  
Concept

Explains the scientific facts about the causes and effects of brownfields in the environment and how they affect individuals and communities



Brownfields  
Literacy

Science  
Literacy

Develops an individual's ability to understand how to use the scientific information about their environment to make informed decisions



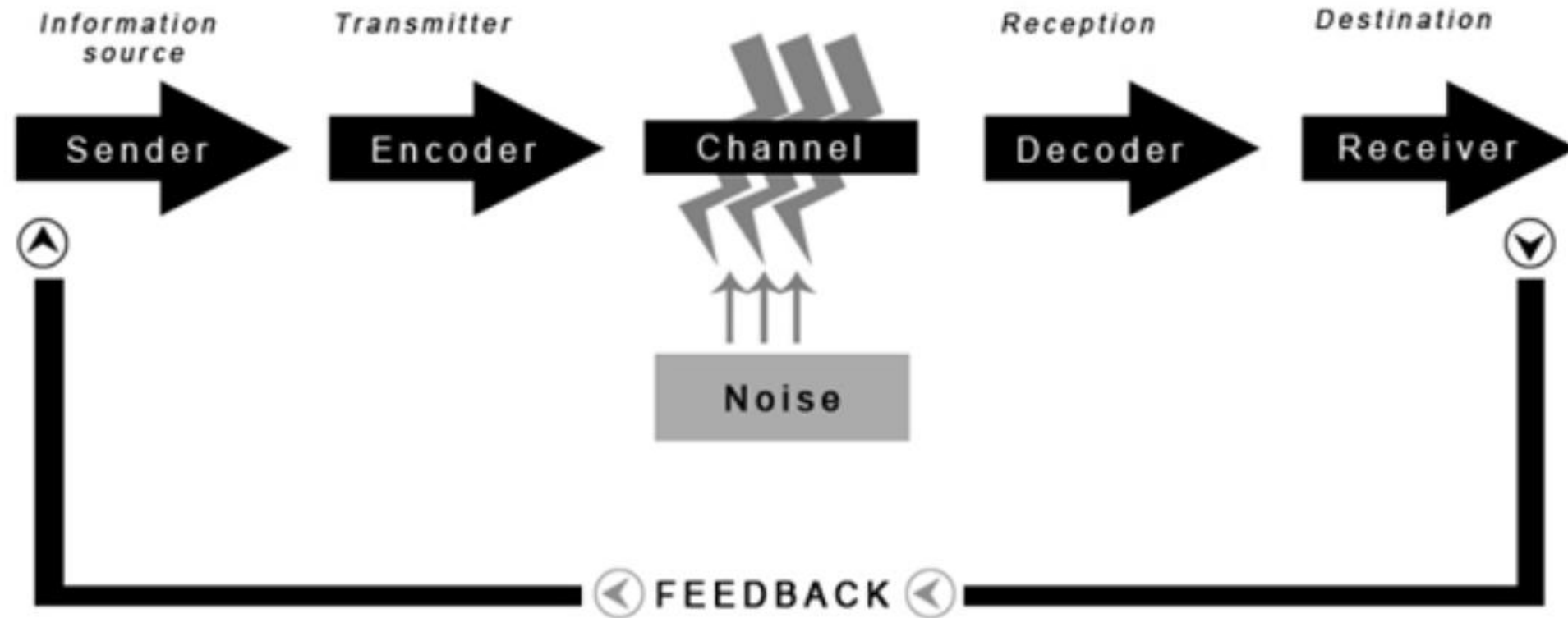
Brownfields  
Communication

Risk/Health  
Communication

Improves science literacy by adapting to the individual's existing literacy level using effective risk and health communication narratives



# Communication Channel Noise (1948)



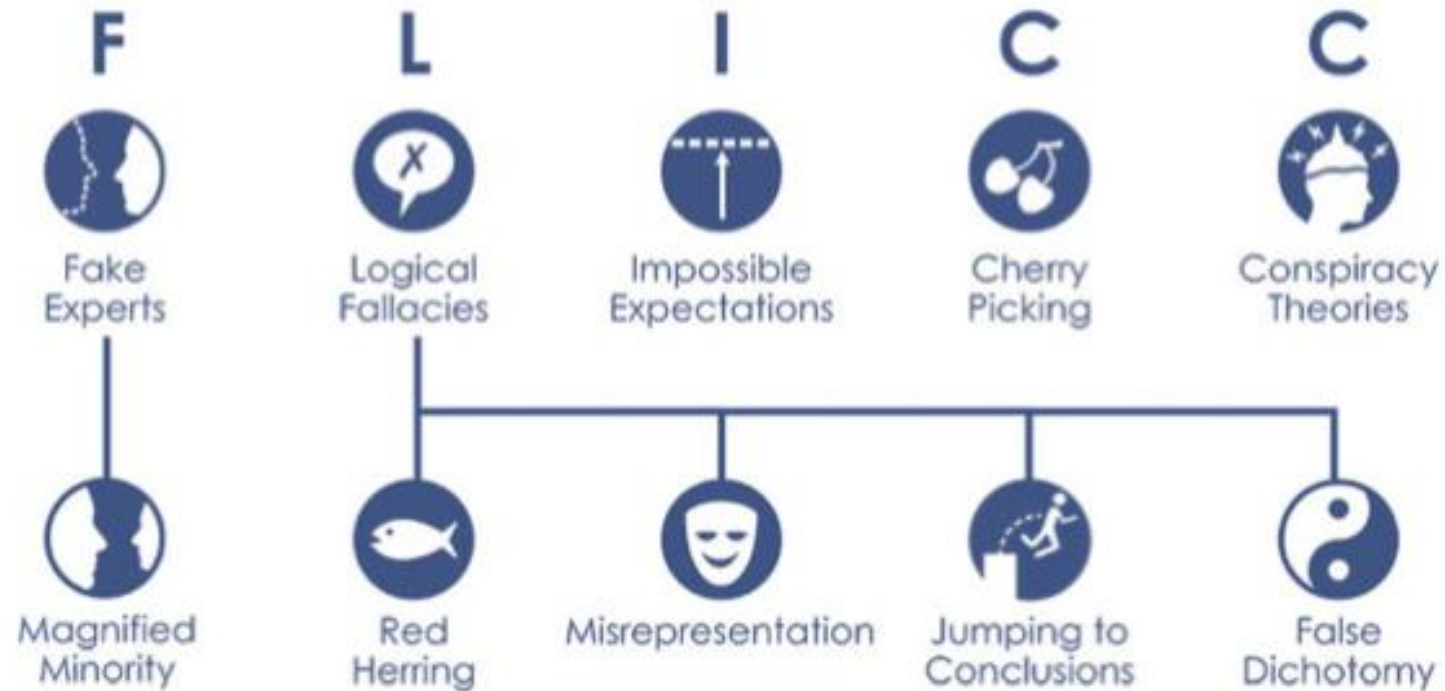
SHANNON-WEAVER'S MODEL OF COMMUNICATION





# Noise: Misinformation and Disinformation

## 5 CHARACTERISTICS OF SCIENCE DENIAL

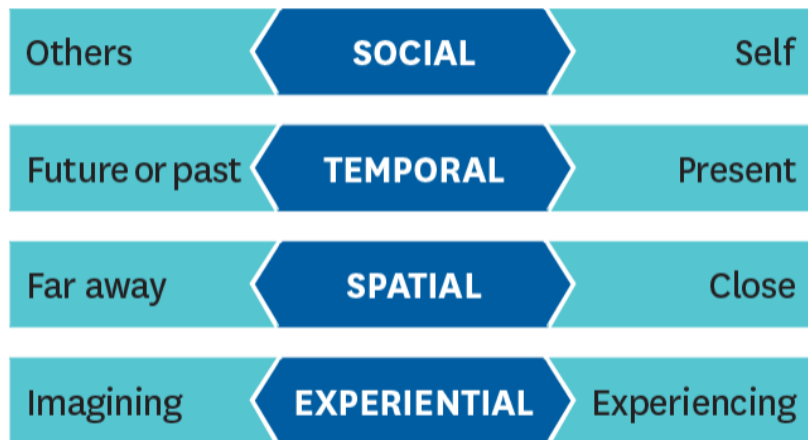


False Equivalency



# Noise: Psychological Distance

## Types of Psychological Distance



SOURCE REBECCA HAMILTON

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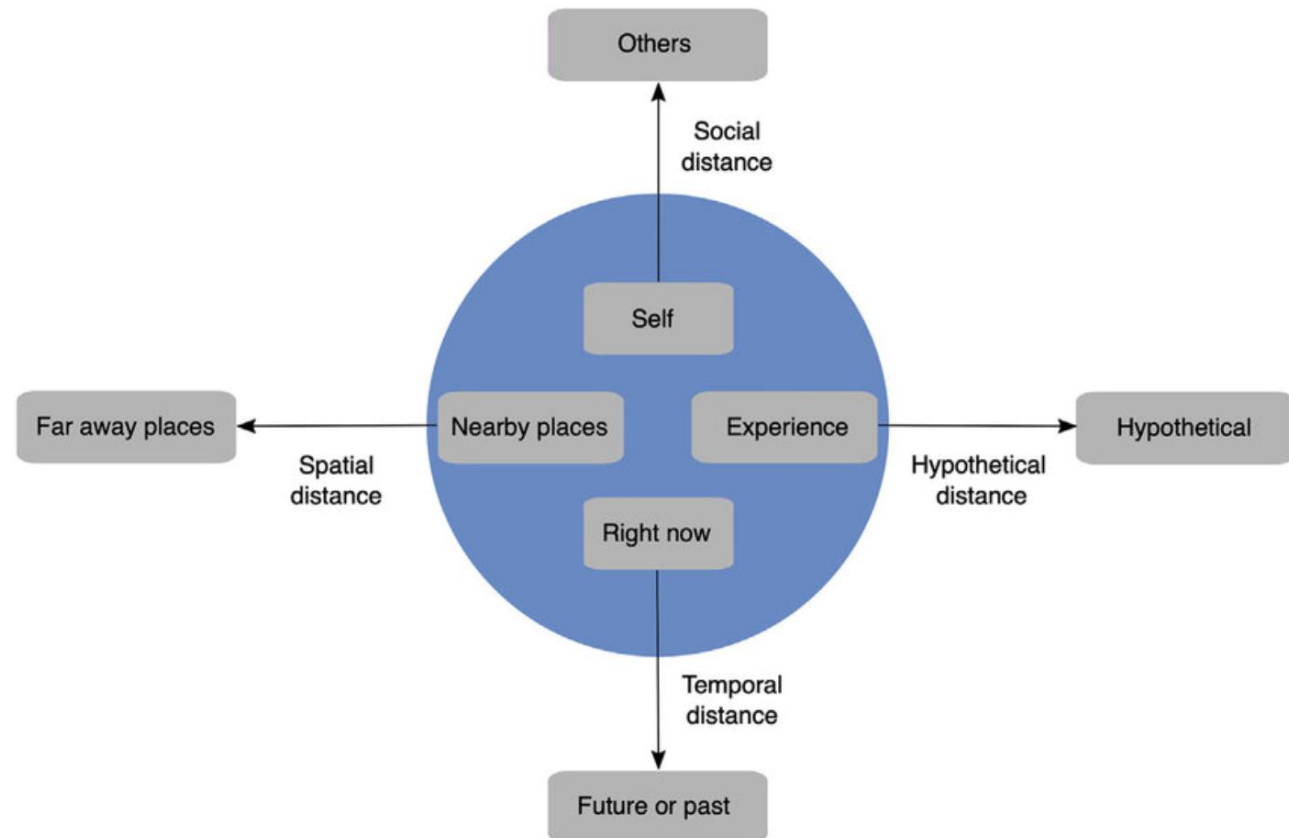
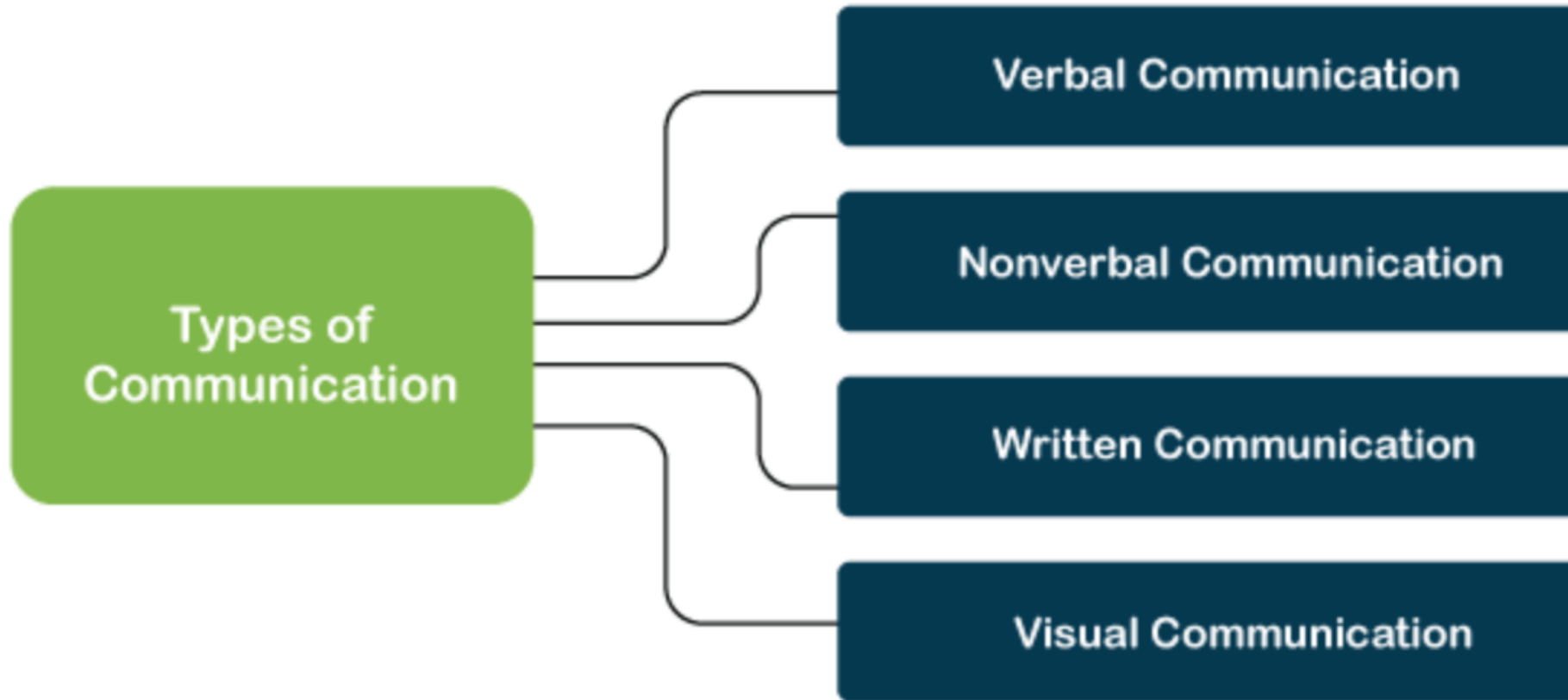


Illustration of four dimensions of psychological distance

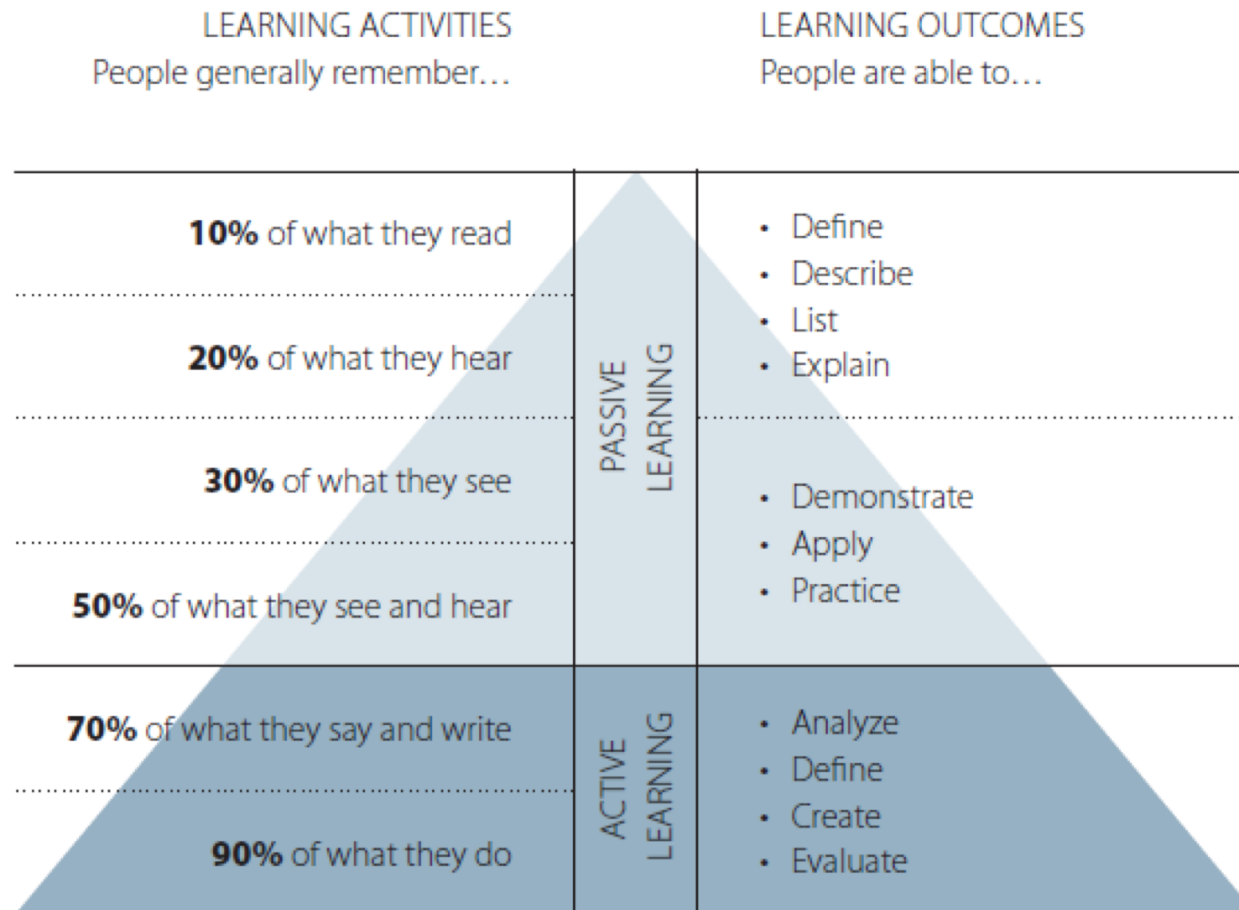




# Modalities of Communication



# How Much Do People Remember?



**How would you like them to remember your message?**

Additional Resources:

Edgar Dale's Pyramid of Learning in medical education: A literature review:

<https://www.tandfonline.com/doi/full/10.3109/0142159X.2013.800636>

Dale's Cone Revisited: Critically Examining the Misapplication of a Nebulous Theory to Guide Practice: <https://www.jstor.org/stable/44428845>

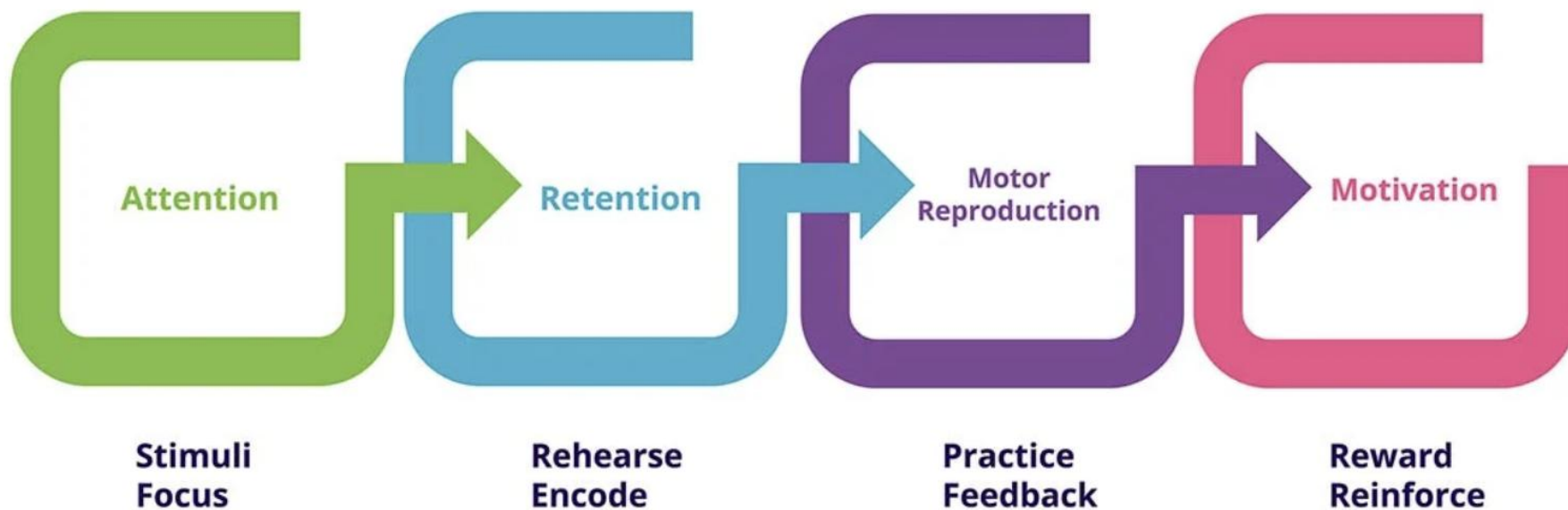


Dale's Cone of Learning

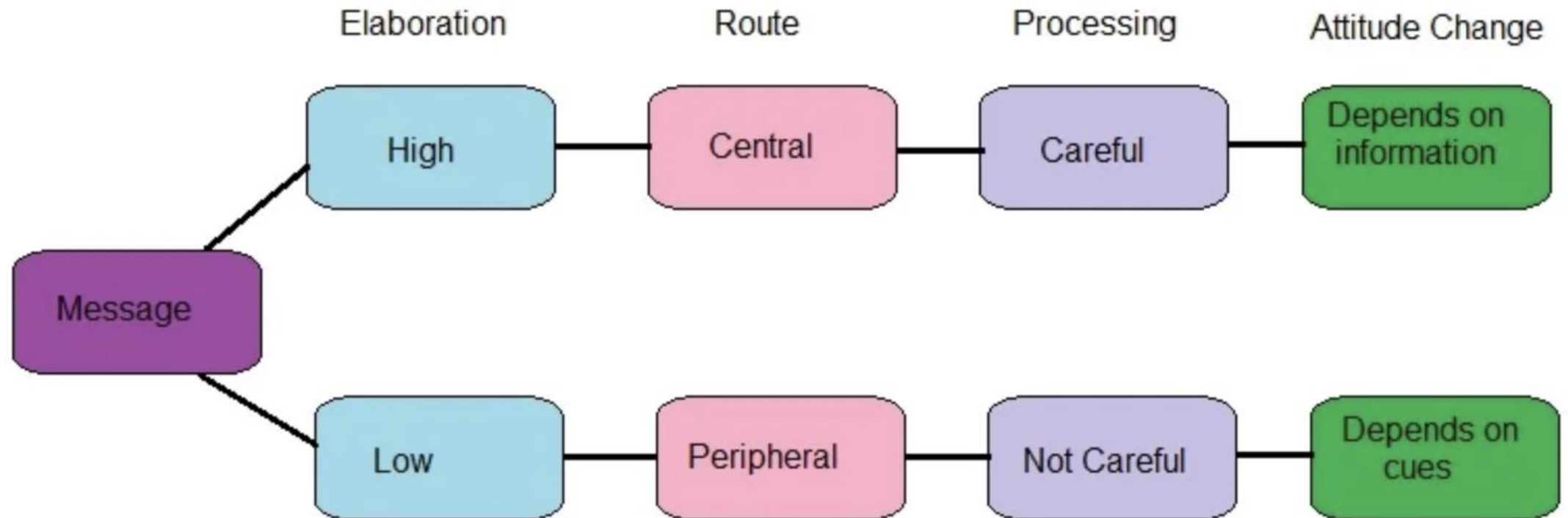


# How Do People Learn?

## Social Learning Theory

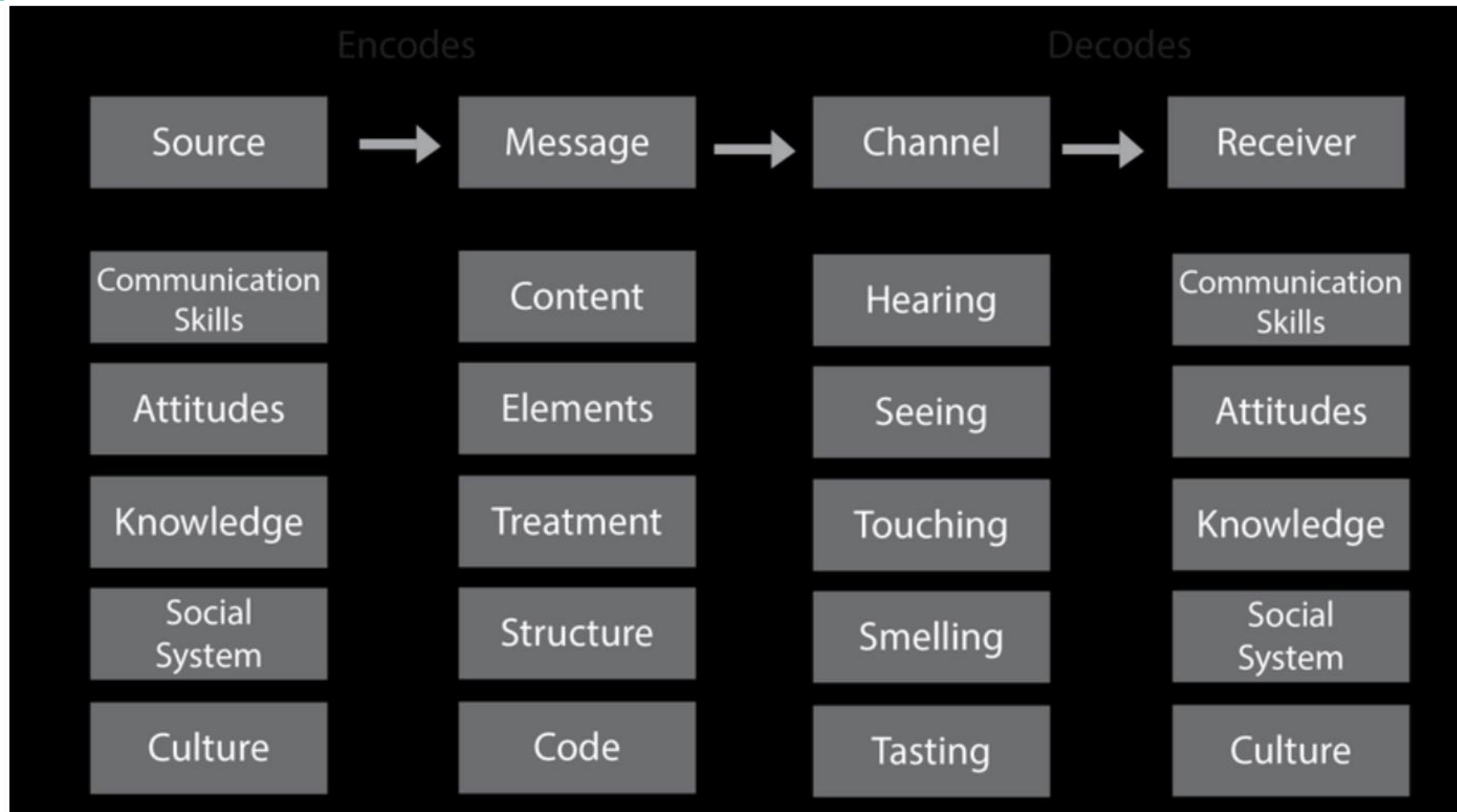


# How Do People Form Attitudes?





# Berlo's SMCR Model of Communication (1960)




Berlo's (1960) Source-Message-Channel-Receiver Model of Communication. Developed from Process of communication: An introduction to theory and practice.


# Message Framing Strategy: Making It Feel Relevant

## Gain Frame

Think about  
**what will be gained**  
if you save water.




Saving water means  
saving money,  
reducing water pollution, and  
protecting the environment.




## Loss Frame

Think about  
**what will be lost**  
if you don't save water.



Failure to save water means  
wasting money,  
increasing water pollution, and  
hurting the environment.



## Gain Frame

**THINK ABOUT THE BENEFITS  
OF RECYCLING**

What will happen if we change our actions to take better care of our environment? The answer is simple.

When we recycle ...

- We will **sustain** our environment for future generations. Every ton of paper recovered for recycling is a ton that does not go to the landfill.
- We will **save** huge amounts of water and energy.
- We will **prevent** pollution problems caused by decreasing the need to collect new raw materials. It leads to lower greenhouse gas emissions that contribute to global climate change.
- We will **conserve** our natural resources, such as timber, water, and minerals.



To find out more about recycling information, call 1-800-255-1111

## Loss Frame

**THINK ABOUT THE COSTS  
OF NOT RECYCLING**

What will happen if we don't change our actions to take better care of our environment? The answer is simple.

When we don't recycle ...

- We will **not sustain** our environment for future generations. Every ton of paper discarded without recycling is a ton that goes to the landfill.
- We will **lose** huge amounts of water and energy.
- We will **create** pollution problems caused by increasing the need to collect new raw materials. It leads to higher greenhouse gas emissions that contribute to global climate change.
- We will **waste** our natural resources, such as timber, water, and minerals.



To find out more about recycling information, call 1-800-255-1111

# Message Framing Strategy: Making It Feel Relevant

Can you See  
the  
Difference?





# Relative Deprivation Strategy: Making It Feel Relatable





# Relative Deprivation Strategy: Making It Feel Relatable

**Can You Feel  
the New  
Setting?**





# Relative Devastation Strategy: Making It Feel Real



# Relative Deprivation Strategy: Making It Feel Relatable

**Can You  
Experience  
the New  
Reality?**





# Promise Strategy: Focusing on the Children





# Legacy Strategy: Honoring The Community Builders





# Promise Strategy: Building A Livable Community



# Social-Ecological Model in Communicating EHL

- Set clear goals of the EHL program for the target populations and/or communities.
- Learn about the community's culture, economic conditions, social networks, political and power structures, norms and values, and demographic trends.

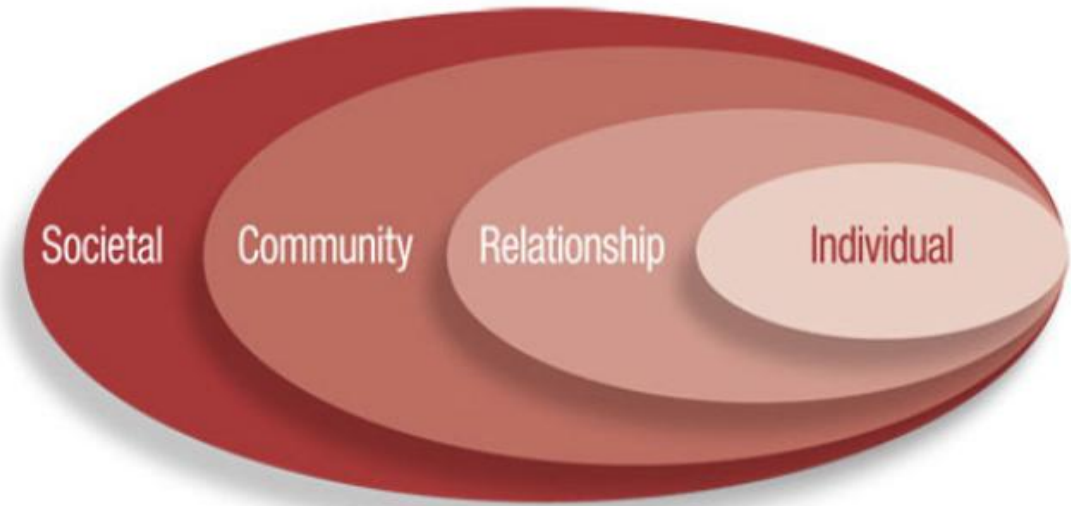


Figure 1.2. The Social-Ecological Model: A Framework for Prevention

- Establish relationships, build trust, work with the formal and informal leadership, and seek commitment from community organizations and leaders to create processes for communicating EHL.





# Impacting Social-Ecological Change

## The Influential Group

1. Government and legislators
2. Corporations and industry  
advocacy groups
3. Public advocacy groups
4. Scientists and Engineers
5. Media industry

## EHL Campaign Planning



## The Influenced Group

1. Demographics
2. Psychographics
3. Geographic locations
4. Media use habits
5. Existing beliefs, knowledge, attitudes and behavior
6. Degree of receptiveness
7. Readiness for action





# Striving For A Thriving Community

Questions?

Comments?

Ideas?

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