The Science of Strategic Communication

Matt Harwell

GEER 2017

Chloe Jackson, Jeannine Molleda



Disclaimer

The views expressed in this presentation are those of the author(s) and do not necessarily represent the views or policies of the Agency. Any mention of trade names or commercial products does not constitute EPA endorsement or recommendation for use.



Science of Strategic Communication

What is Strategic Communication

- The Three Pillars
- The "Is" List

Generalizable Framework
 The Natural Sciences Literature

Strategic Communication Matrix

This session's excellent speakers

Strategic Communication 101

- The purposeful use of communication by an organization to fulfill its mission
 - a process to advance national interests using coordination
- The field of Strategic Communication involves a focused effort to identify, develop, and present multiple types of communication media on a given subject

Military

Business

- to gain information improve transparency hold that thought
 - align stakeholders

Science

The Three Pillars

Elements composed of three pillars:

- Message Identifying the right content for a given audience and a vehicle
- Audience Identify the right target group for a given message and vehicle
- Vehicle Identify the right types of media for a given message and audience

Audience

Vehicle

Message

Can serve as a way to show an audience where they, the message, and vehicle fit into the larger picture (i.e., "you are here")

The "Is" List

- A targeted list of messages, audiences, and vehicles to meet the goals and objectives for a project
- A collaborative effort of practitioners and communicators
- A facilitator for active stakeholder engagement
- A holistic approach to planning, executing, and incorporating feedback from overall communications

The "Is Not" List

- A partial list of messages, audiences, and vehicles (e.g., a laundry list) that only meets some goals/objectives
- Put together in a vacuum

- A replacement for active stakeholder engagement
- A briefing/communication strategy by itself

f	🄰 8 🖸 in						
t	🖸 👰 🔊 🥌						
÷							
© 2017 USA TODAY, a division of Gannett Satellite Information Network, LLC.							
	1 Original Church arris						
	1. Overall Strategy						
	2. Background						
	3. Key Message Points						
	4. Target Audience/s						
	5. Anticipated Reaction						
	6. Communication Materials to be Developed						
	7. Timeline						

8. Notification Plan

Strategic Communication in Science

Science and the "deficit model" (literature)

- > Non-scientists are not educated or informed on a topic;
- \succ Once the audience is educated on the topic, they will accept an issue;
- If members of the public only understood the scientific facts, they would be more likely to see the issues as experts do;
- A lack understanding of science fully explains why more people do not appear to accept scientific claims or support policies that are consistent with scientific evidence.

Effective science communication requires engagement with different audiences in different places at different times, taking account of what they want to know and already know, understand, and believe. (NRC 2017; paraphrase)



Talk nerdy to me

TEDGlobal 2012 · 4:34 · Filmed Jun 2012

39 subtitle languages

View interactive transcript



x Passion

Relevance

Science – (Jargon + Bullets)

Understanding

D. Ned

Natural Sciences Literature Search

Literature Search:

- Google Scholar
- Web of Science
- Publish or Perish

"strategic communication" and

- "natural resources management"
 - "ecosystem restoration"

"habitat conservation"

Search		My Horsey My Closice	re ∎Aerts ⊠Merce ¢lle Ogle	fings
			Hotar	ġ
Auftror impact Jacunal impact General Auftoria Multi-scary center Web browser Check for updates What is new? 2 Moute etim 2 Moute etim	Papers: 328 Papers/author: 160.61 Citations: 8883 Cites/year: 286.55 Years: 31 Cites/auth/year: 146.04	h-index: 30 Ganzel Wolfgang; al g-index: 87 Querr disc: 2014/2-11 h-index: 29 Querr disc: 2014/2-11 h-index: 29 Catalons; 888 hit,nom: 24 Year: 31		Lookus Lookus Hel
PuP FAQ PoP web ste PoP book	Cites Per year Rank Authors If 1381 29.31 1 W Glanzel If 1376 47.00 2 T braun, W Glanzel, A If 1376 47.00 2 T braun, W Glanzel, A If 1304 25.33 3 W Glanzel, AF Noed If 1204 12.36 4 8 Schubert, W Glanzel If 1252 28.00 5 W Glanzel, A Schubert If 1252 28.90 6 D Person, W Glanzel, A If 1229 28.63 7 W Glanzel If 1205 22.78 8 T Braun, W Glanzel, A	Title National chyracteristics in internatio Schubert A Hrisch-type index for journali Journal impact measures in bibliome K, T Braun Scientometric datafiles. A comprehe transmissionet in datafiles. A comprehe	2006 Scientometrics etc. 2002 Scientometrics ec. 1989 Scientometrics g 2005 Handbook of quantilative sc e 2004 Scientometrics ar 2005 Scientometrics ar 2004 Scientometrics 2005 The scientist Scientometrics	Publisher * Springer Springer skademial.com skademial.com
b of Science™ InCites™ Journal Citatio	n Reports® Essential Science Indicators	SM EndNote™		
VEB OF SCIENCE Web of Science™ Co				Му То
			И	Velcome to the
asic Search 🔽				
asic Search 🔽 Example: oil spill* mediterranean	+ Add Another Fi	eld Reset Form	~	Search







Strategic Communication Matrix

Three organizational tiers/levels

- Goals start with these
- Communication Matrix
- More complex; implementation



Audiences

Tab 1: Project Goals & Communication Goals

ę	SHC 2.61 Communication Matrix						
Project Goals:		Communication Goals Option 1 - Actions	Communication Goals Option 2 - Outcomes				
a m	Goal 1 : The goal of this project is to assess the transferability, scalability, applicability, uncertainty, and relevance of ecosystem service-related frameworks, models, methods (including involving community engagement), and tools that link the production of FEGS to human health and well-being.	2. Communicate the importance of tools (methods/models) to study ES.	Targeted audiences understand the relevance of ES and human health and well-being. Targeted audiences understand the importance of tools (methods/models) to study ES, and understand how to use them.				
u	e production of FEGS to numan nearth and wen-being.		ed Targeted audiences understand the transferability, scalability, and applicability of the applied science of ES.				
	Goal 2: The goal of the Integration, Synthesis, and Strategic Communication (ISSC) Task is to facilitate, coordinate, and integrate research across the focus areas and	1. Communicate the importance of facilitation and integration among Tasks.	Targeted audiences understand the importance of facilitation and integration among Tasks.				
	among the case study locations, and communicate results of original research that utilize connections between community decisions, stressors, production functions,		Targeted audiences have received research results.				
F	FEGS, and benefits.	3. Communicate the importance of strategic communication. Targeted audiences understand the importance of strategic communicati					
ti h	Goal 3: The goal of the Final Ecosystem Goods and Services (FEGS) Task is to develop the linkages between the production of ecosystem goods and services to changes in human health through the identification of metrics and indicators of FEGS for multiple environmental classes and individual communities, and the transferability						
	of metrics and indicators of FEGS among places and ecosystems.	 Communicate FEGS metrics and indicators. Communicate the transferability, scalability, applicability and relevance of FEGS 	Targeted audiences understand FEGS metrics and indicators. Targeted audiences understand the transferability, scalability, applicability and relevance				
	Goals Matrix	x Tracking and Implementation	of FEGS metrics and indicators. Instructions for tracking				

Tab 2: Matrix

*Note: Hover over cells with a red triangle flag in the top right corner to see additional information.			Matrix Management					
Project Goal	Communication Goals	Message/Focal Point	SHC/NPD (management side)	ORD (management side)	Labs (management side)	EPA Regions and Program Offices (management side)		
-	human health and well-being.	Message 1 + Vehicles Message 2 + Vehicles Message 1 + Vehicles						
:	3. Communicate the transferability, scalability, uncertainty, and applicability of applied science of ES.	The importance of using a practical strategies approach.	Vehicle = PRS	ORAF				
	 Communicate the importance of facilitation and integration among Tasks. 	Message 1 + Vehicles		\mathbf{V}				
	2. Communicate the results of research.	Message 1 + Vehicles						
2		Present an organized framework for capturing the range of communication needs for a project and to help identify gaps and opportunities.	It is important to use an organized framework and matrix structure to capture the range of scientific communication activities. This allows for tracking past, current, and future communication needs. (presentation, email, manuscript, report)	It is important to use an organized framework and matrix structure to capture the range of scientific communication activities. This allows for tracking past, current, and future communication needs. (presentation, email, manuscript, report)	It is important to use an organized framework and matrix structure to capture the range of scientific communication activities. This allows for tracking past, current, and future communication needs. (presentation, email, manuscript, report)	It is important to use an organized framework and matrix structure to capture the range of scientific communication activities. This allows for tracking past, current, and future communication needs. (presentation, email, manuscript, report)		
		It is important to make and implement a strategic communication plan at the beginning of a project for dissemination of information to ensure and track successful two-way communication between communicator and audience.	make and implement a strategic	their project. This will allow them to disseminate their research results through two-way communication between the communicator and the	It is important to encourage scientists to make and implement a strategic communication plan at the beginning of their project. This will allow them to disseminate their research results through two-way communication between the communicator and the audience, and will help track and ensure successful communication. (newsletter, email, presentation, fact sheet, manuscript, report)	the beginning of their project. This will allow them to disseminate their research results through two-way communication between the communicator and the audience, and will help track and ensure successful communication.		

4 - P

Goals

Matrix

Tracking and Implementation

Instructions for tracking

Tab 3: Tracking and Implementation (metadata)

		Message/Purpose	Vehicle	Date of distribution	Next revision target date	Audience	Internal Review Complete?	
Project Goal	Communication Goals							
1	1. Communicate the relevance of ES and human health and well-being.							
	2. Communicate the importance of tools		LLR Fact Sheet			A.		
	(methods/models) to study ES.		Lessons Learned Report		6	RAF		
	3. Communicate the transferability, scalability and applicability of applied science of ES.		GMeCCS Synthesis Report		•			
2	1. Communicate the importance of facilitation and integration among Tasks.							
	2. Communicate the results of research.		2.61 FY16 Output					
	3. Communicate the importance of strategic communication.	It is important to make and implement a strategic communication plan at the beginning of a project for dissemination of information to ensure and track successful two-way communication between communicator and audience.	Strategic Communication Poster (ACES)	12/2016		Scientists attending ACES	Yes	
	Goals	Matrix Tracking	and Impleme	entatio	n I	nstructio	ns for t	racking
				/				

IMPORTANT: Rest of Session - excellent speakers!

- Stephanie Johnson
 - National Academies
- Todd Hopkins
 - Landscape Conservation Cooperative
- Patti Gorman
 - RECOVER (SFWMD)
- Shannon Estenoz
 - ► SFERTF

Stay for Panel Discussion before lunch break!



Neural coding 2: Measuring information within the brain April 17, 2017



In my previous neuroscience post, I talked about the spike-triggered averaging



Our Bloggers

Neural coding 2: Measuring information within the brain *The Brain Bank North W* EPA request asking newest smog standa be postponed, granted by court *Alan Kan* Do You Need A Mastectomy? *Gaia Can*

Our Bloggers Topics