

Less is More: Crafting & Delivering Compelling Messages

Center for Health and Science Communication
Bernard Becker Medical Library



Washington University School of Medicine in St. Louis

Center for Health and Science Communication



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Center for Health and Science Communication

Our work spans four service areas to meet our mission to serve as a hub for resources and engagement around health and science communication at WashU Medicine.



Education and Training



Consultations



Resources



Connections

[**Center for Health and Science Communication**](#)

A close-up, shallow depth of field photograph of a person's hands typing on a laptop keyboard. The hands are in the foreground, with fingers positioned on the keys. The laptop screen is visible on the left, showing a blurred document with text and images. In the background, a window looks out onto a colorful, possibly snowy or colorful, outdoor scene.

“The biggest
problem with
communication is
the illusion that it
has been
accomplished.”

George Bernard Shaw

Communication Strategies: Planning

What is your goal? Objectives?

Who are you trying to reach?

How much time are you able to invest?

What is your strategy to achieve your goal and reach your audience?

Your message should be...

Audience-centered

Useful & relevant

Easy to understand



Communication Strategies: Audience-centered

Define your audience.

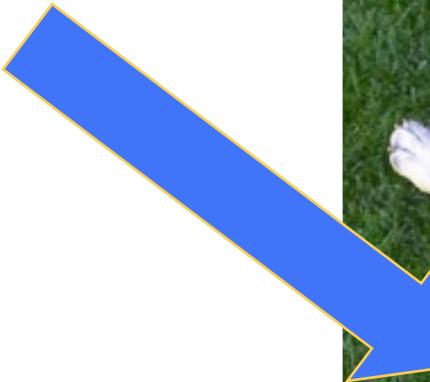
Be specific.

Meet your audience where they are.

Find out what they already know.

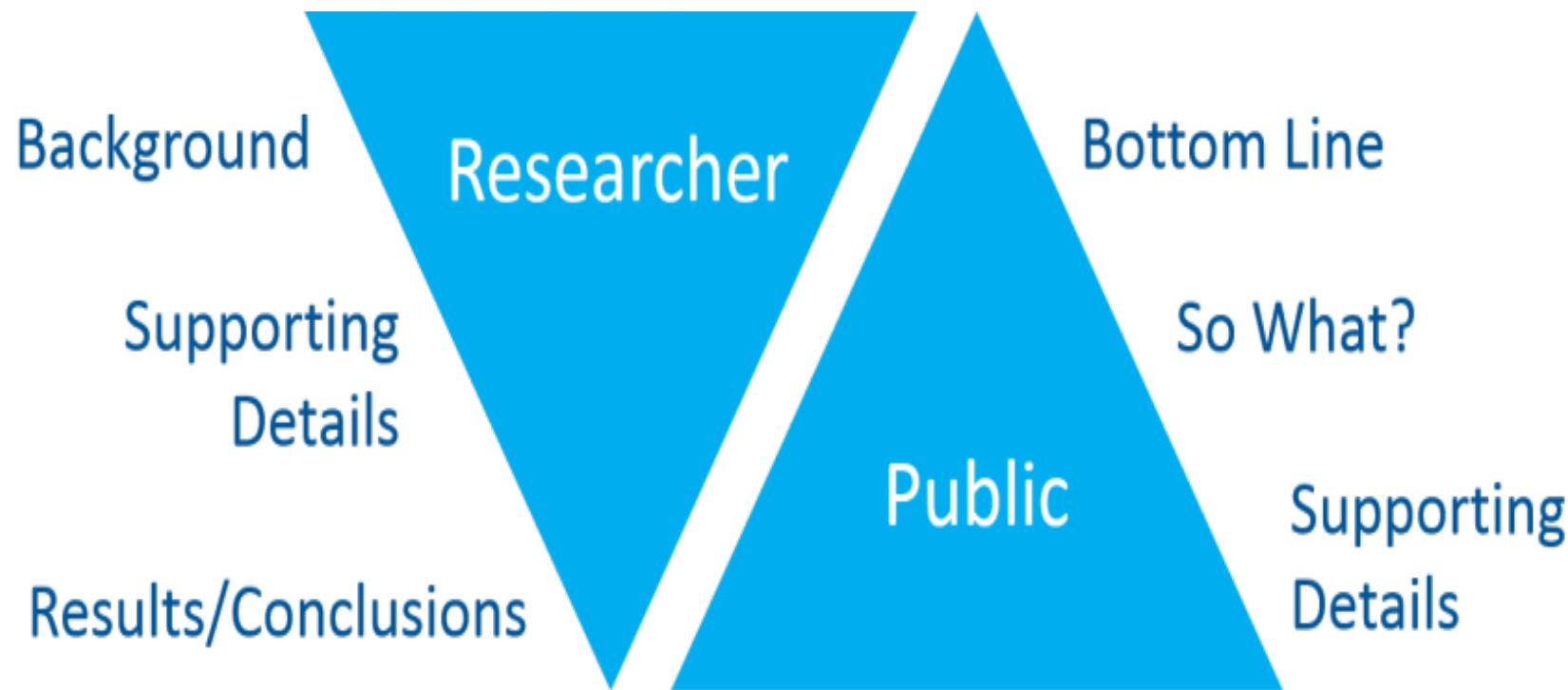
Motivate the audience to listen.

Your audience



[DaPuglet](#) CC BY-SA 2.0

Your structure depends on the audience



Adapted from Nancy Baron's *Escape from the Ivory Tower* AAAS Center for Public Engagement with Science & Technology

[AAAS Communication Toolkit](#)

Communication Strategies: Useful and relevant

Tailor the message for the situation.

Stick to one theme or idea.

Don't overwhelm your audience.



“It’s hard because you are kind of married to your data and want to show it off, but I find I have to be realistic and ask myself, ‘Of all the pieces of data that prove point A, what is best to highlight that issue?’”

Dr. Nika Danial

Dana-Farber Cancer Institute/Harvard University

Communication Strategies: Easy to understand

Use plain language best practices

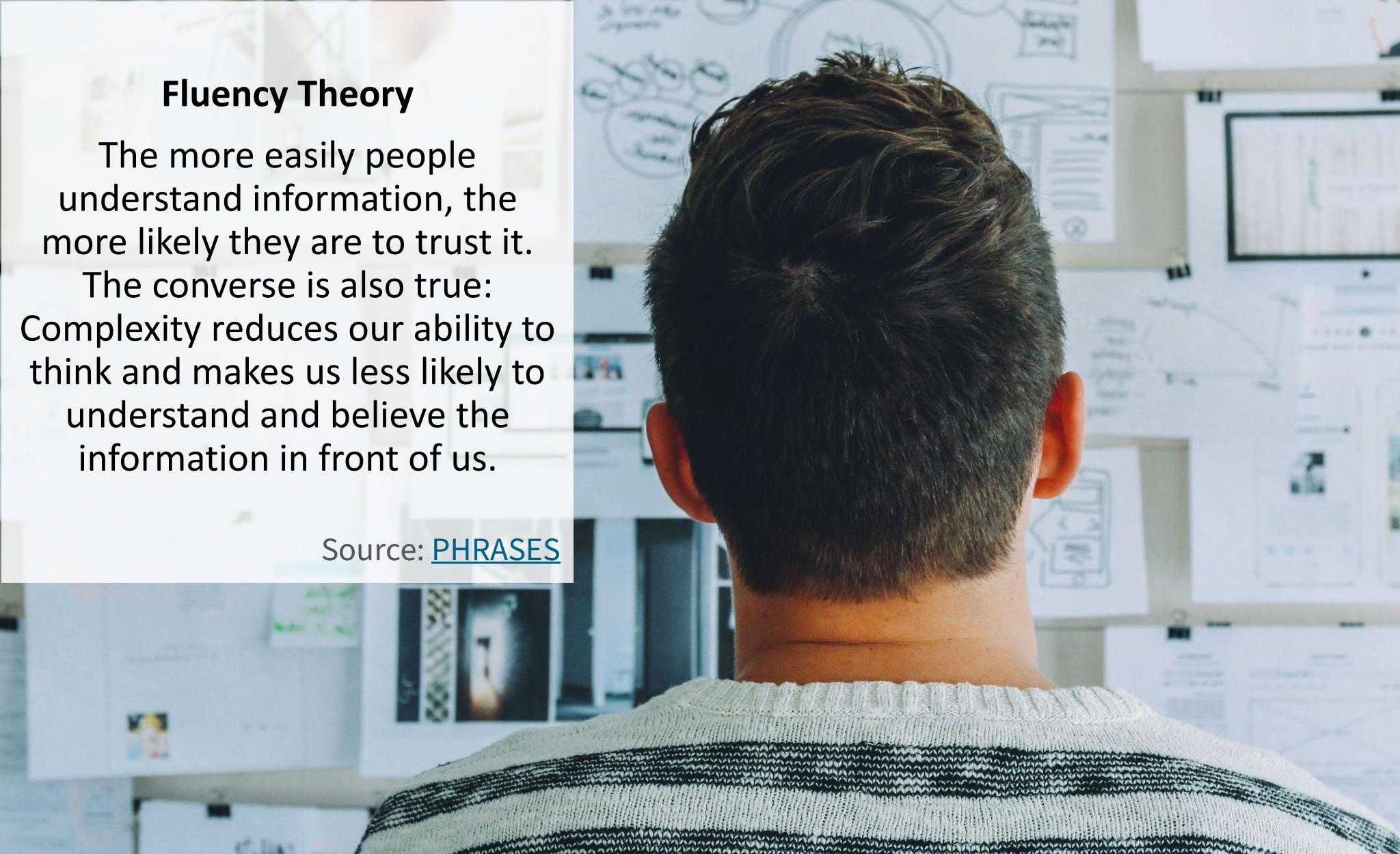


Fluency Theory

The more easily people understand information, the more likely they are to trust it.

The converse is also true: Complexity reduces our ability to think and makes us less likely to understand and believe the information in front of us.

Source: [PHRASES](#)



Plain language can be used to:

- Communicate with patients and research participants
- Create consent documents for research studies
- Talk to non-scientific audiences, such as funding agencies, stakeholders, community groups
- Simplify research for lay summaries and abstracts

Plain Language Principles

Simplify complicated words

Prolonged

Better terms:
stays, lasts long

Explain terms as they are introduced

Prophylaxis

Further explain:
?

Plain Language Principles

Avoid words with dual meaning

Novel

Better term:

New

Define abbreviations (first use)

PCP

Better term (first use):

Primary Care Physician

PASSIVE VOICE

Samples were collected by
our team.

ACTIVE VOICE

Our team collected samples.





Health Literacy Editor

▲ CHECK MY TEXT

H1 H2 H3 | B I U | ≡ ≡

Characters: 2615 | Words: 471 | Unique Words: 207 | Sentences: 48 | Paragraphs: 28

What is **pneumocystis pneumonia**?

Pneumocystis pneumonia or **PCP** is a **fungal infection** in one or both **lungs**. It is common in people who have a weak **immune system**, such as people who have **AIDS**.

The **disease** is less common in the **U.S.** than it used to be. When it happens, you need **medical attention** right away.

What causes **PCP**?

The **fungus Pneumocystis jiroveci** causes **PCP**. Many people live with this **fungus** in their **lungs** every day. It's common all over the world. It usually causes little to no trouble for people with healthy **immune systems**. But if your **immune system** is **weakened by HIV/AIDS, cancer, organ transplant, medicines that suppress the immune system, or another condition that causes the immune system to not function well**, you have a greater chance of getting **PCP**. **PCP** takes advantage of your weak **immune system** to attack.

If not **treated** right away, **PCP** can be **severe** and even **fatal**.

Who is at **risk** for **PCP**?

You are more likely to get **PCP** if you have a **weakened immune system**.

What are the **symptoms** of **PCP**?

Symptoms of **PCP** may **develop** over a **period** of weeks or months. The most common **symptoms** to watch for **include**:

Fever that comes on **suddenly**

Cough

Trouble breathing. It often gets worse with **activity**.

A dry cough, with little or no **mucus**

Chest **tightness**

Full Text Editor **Text Preparation**

IMPORT **EXPORT** **?**

7 OF 12 FEATURES ACTIVE

Readability +

Grade: **11**

Aim for Grade 8 or lower.

73 words are long (more than 2 syllables).

3 sentences are long.

1 sentence may contain a list.
Use dot points for lists of more than 4 things.

Complex Language ▲ +

Text complexity: 27.9%

39 words or phrases with alternatives in our thesaurus.
If you need to use a complex medical term, make sure you define it first.

60 uncommon words.
These words may not be familiar to people with limited English.

24 instances of acronyms.
Always define acronyms first and minimise their use where possible.

Text from: [Johns Hopkins Medicine](https://www.johns Hopkins Medicine)

<https://shell.techlab.works/>



Health Literacy Editor

A CHECK MY TEXT

H1 H2 H3 | B I U |

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What causes **PCP**?

The **fungus Pneumocystis jiroveci** causes **PCP**. It **lives in the lungs** and **breathes** **oxygen** **every day**. It's common all over the world. It **usually causes little to no trouble** for people with healthy **immune systems**. But if your **immune system** is **weakened** by **HIV/AIDS**, **cancer**, **organ transplant**, **medicines that suppress the immune system** or another condition that causes the **immune system** to not function well, you have a greater chance of getting **PCP**. **PCP** takes advantage of your weak **immune system** to attack.

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Fever that comes on **suddenly**

Cough

Trouble breathing. It often gets worse with **activity**.

A dry cough, with little or no **mucus**

Shortness of breath

supress may be an example of complex language.

Alternatives for "supress" include: hold back, stop, slow down

Full Text Editor **Text Preparation**

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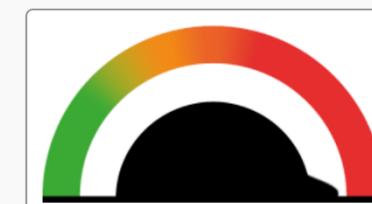
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Text from: Johns Hopkins Medicine

<https://shell.techlab.works/>

De-Jargonizer

Individuals with **neurofibromatosis** type 1 (**NF1**) are **prone** to the **evolution** of **neurodevelopmental symptomatology** including motor delays, learning disabilities, autism, and attention **deficits**. Caused by **heterozygous germline mutations** in the **NF1 gene**, this **monogenic** condition offers unique opportunities to study the genetic **etiologies** for **neurodevelopmental disorders** and the **mechanisms** that **underlie** their formation. Although numerous small animal models have been generated to **elucidate** the causes of these **alterations**, there is little **consensus** on how to **align preclinical observations** with clinical outcomes, **harmonize** findings across species, and **consolidate** these **insights** to chart a **cohesive** path forward. **Capitalizing** on expertise from **clinicians**; human, animal, and **cellular** model research scientists; and **bioinformatics** researchers, the first **Cognition** and Behavior in **NF1 (CABIN)** meeting was **convened** at the Banbury Center of Cold Spring Harbor **Laboratory** in October 2024. This Perspective **summarizes** the state of our understanding and a proposed plan for future investigation and **exploration** to improve the quality of life of those with **NF1**.



Common: 75%, 118

Mid-Frequency: 13%, 20

Rare: 13%, 20

Suitability for general audience score: 81

Number Of Words: 158

Download

 Share

Text from:
<http://www.genesdev.org/cgi/doi/10.1101/gad.352629.125>

<http://scienceandpublic.com/>

So, what words can you use?

Clinical Research Glossary (Multi-Regional Clinical Trials Center)

<https://mrctcenter.org/glossary/>

Everyday Words for Public Health (CDC)

<https://www.cdc.gov/other/pdf/everydaywords-060216-final.pdf>

Glossary of HIV/AIDS-Related Terms (NIH's Office of AIDS Research)

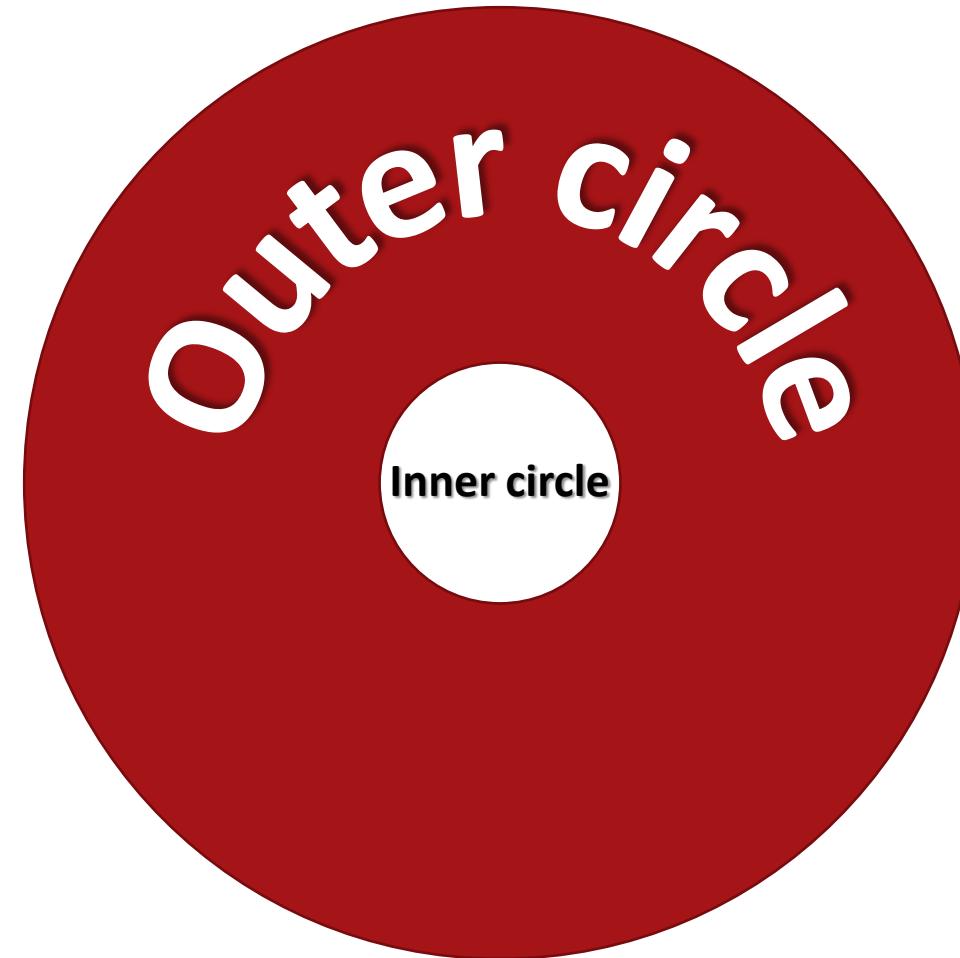
https://clinicalinfo.hiv.gov/sites/default/files/glossary/Glossary-English_HIVinfo.pdf

Plain Language Word List (Health Research for Action)

<https://multco-web7-psh-files-usw2.s3-us-west-2.amazonaws.com/s3fs-public/PlainLanguageWordList.pdf>

Readability Toolkit Thesaurus (PRISM)

<https://your.yale.edu/policies-procedures/other/prism-readability-toolkit>

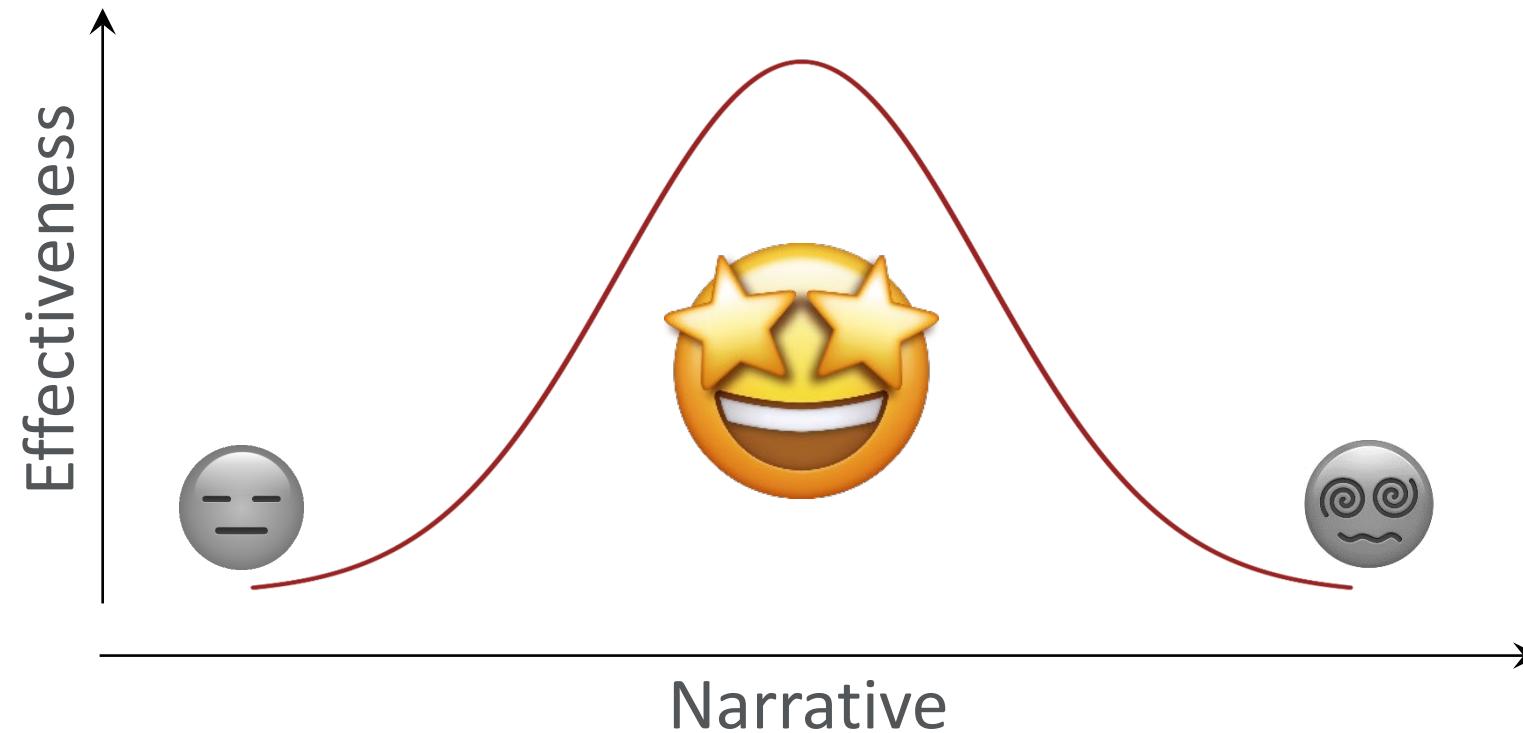




- ✓ Topic
- ✗ Extent
- ✗ Complication
- ✗ Structure

Image from Etsy.com

Narrative = $F_{topic, extent, complication, structure}$



The ABT framework

“There is not just one way of getting to that sweet zone, and if you go online you’ll find many methods, but there’s one that I find very useful, and therefore I thought I’d share it with you.”

The ABT framework

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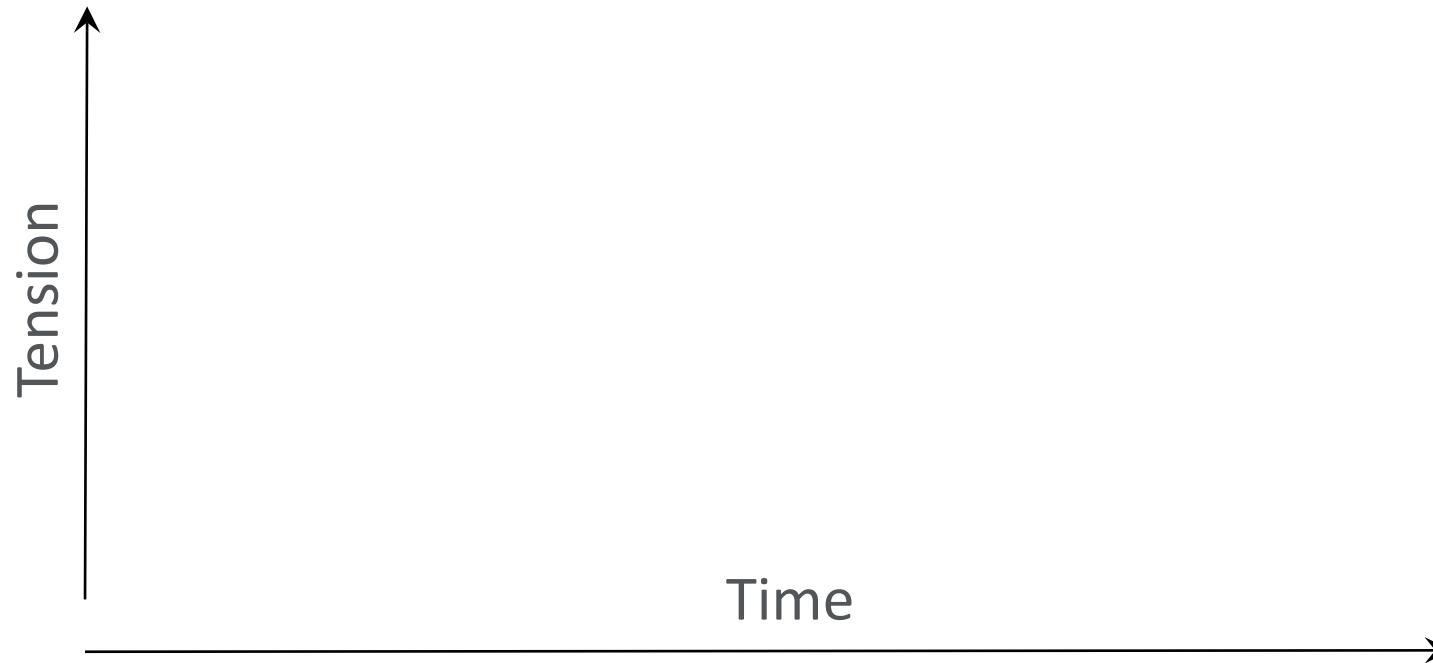
“There is not just one way of getting to that sweet zone, **and** if you go online you’ll find many methods, **but** there’s one that I find very useful, and therefore I thought I’d share it with you.”

The **ABT** framework

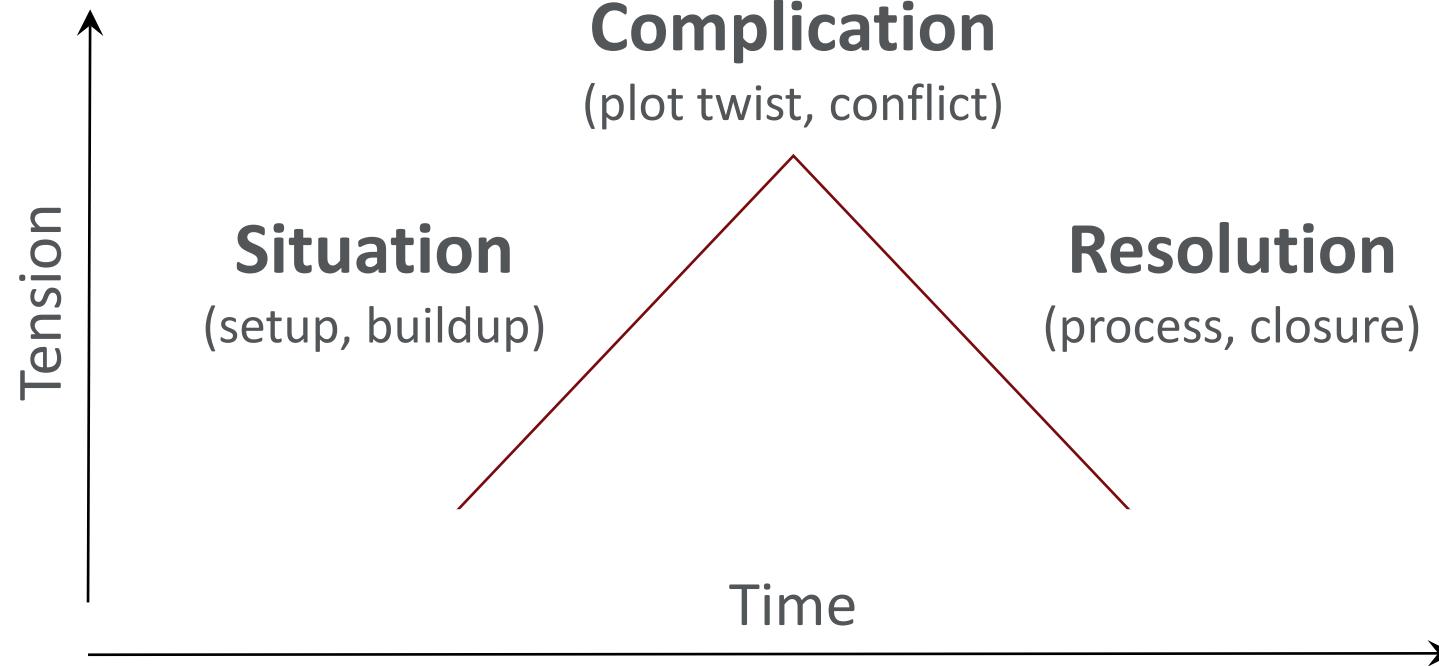
“There is not just one way of getting to that sweet zone, **and** if you go online you’ll find many methods, **but** there’s one that I find very useful, and **therefore** I thought I’d share it with you.”

[...] and [...] but [...] therefore [...]

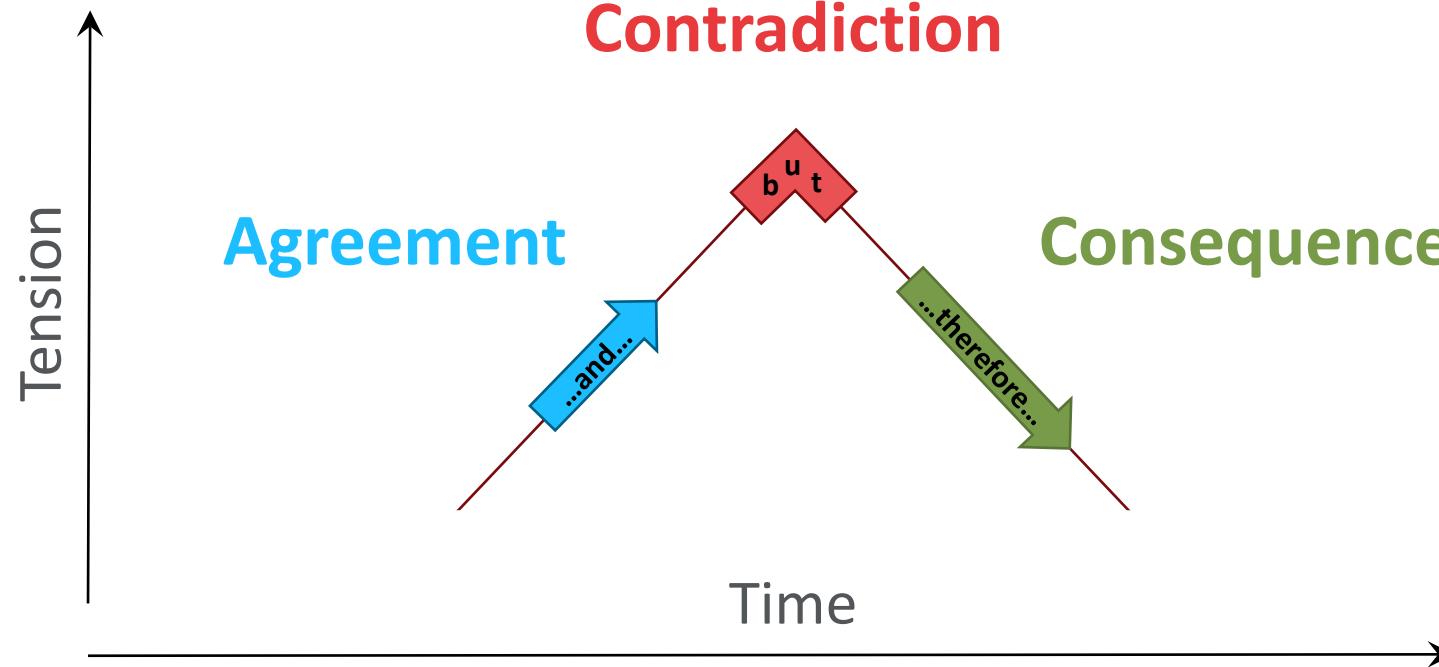
Memorable books, movies, podcasts are good stories



Memorable books, movies, podcasts are good stories



Turn anything into a story using the ABT framework!



Narrative switch words

Agreement

and
also
as well as
moreover
likewise

Contradiction

but
however
instead
otherwise
conversely

Consequence

therefore
so
as a result
for this reason
accordingly



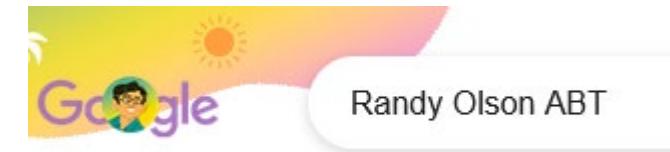
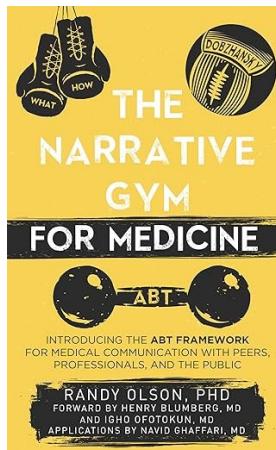
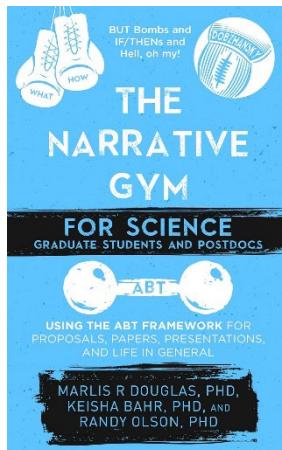
Randy Olson, PhD

“This storytelling approach is universal, **and** we all have an intuitive sense of what makes a good story; **however**, it was Randy Olson who formalized it and made it popular, **to the point that** it turned into a career for him.”

Biology professor turned filmmaker turned story coach



Randy Olson, PhD



#208) The Two Narrative Metrics

Posted on April 10, 2025

An essay on the And Frequency (AF) and Narrative Index (NI). Originally published as Appendix 2 in "The Narrative Gym for Politics."

It's called the ABT Narrative Template.

We developed it. We want to train you with it.

The Narrative Gym
Concept

Low Impact
Training

High Impact
Training

One (professional) question that you have trouble answering concisely?



What's your research about?

Can you walk me through your poster?

Are we close to a cure?

How will your research advance the field, and impact society?

“I would have written a shorter letter, but I didn’t have the time.”
Cicero, 106 – 43 BCE

...hanging out with friends?



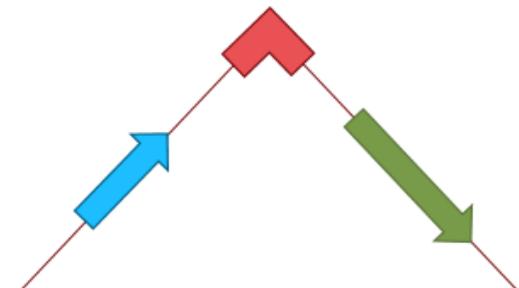
...discussing with a fellow scientist?



...advising a patient?



...writing a research statement?



Context grid

[Question or comment]

Format	Who is asking?	Situation

[Question or comment]

Format	Who is asking?	Situation
Verbal? <ul style="list-style-type: none">•Spontaneous, friendly•Known / prepared in advance•At a conference or meeting Written? <ul style="list-style-type: none">•E-mail•Statement		

[Question or comment]

Format	Who is asking?	Situation
Verbal? •Spontaneous, friendly •Known / prepared in advance •At a conference or meeting Written? •E-mail •Statement	•New acquaintance •Friend / family member •Colleague •Supervisor •Mentee •Potential donor •Funding agency	

[Question or comment]

Format	Who is asking?	Situation
Verbal? •Spontaneous, friendly •Known / prepared in advance •At a conference or meeting	•New acquaintance •Friend / family member •Colleague •Supervisor	•Professional, but casual •Professional, but business •Networking event •Casual, with friends / family
Written? •E-mail •Statement	•Mentee •Potential donor •Funding agency	•Professional social media •Job application •Grant application

[Question or comment]

Format	Who is asking?	Situation
Verbal? • Spontaneous, friendly • Known / prepared in advance • At a conference or meeting	• New acquaintance • Friend / family member • Colleague • Supervisor	• Professional, but casual • Professional, but business • Networking event • Casual, with friends / family
Written? • E-mail • Statement	• Mentee • Potential donor • Funding agency	• Professional social media • Job application • Grant application

[...] and [...] but [...] therefore [...]

Story portfolio

[Question or comment]

Format	Who is asking?	Situation
Format	Who is asking?	Situation
Format	Who is asking?	Situation

Example:

“Adolescents living with HIV have shown high rates of mortality, virologic failure, and loss to follow up. Treatment fatigue, forgetting, internalized stigma, interference with school and conflict with social and extra- curricular activities all contribute to lapses in adherence to oral, daily ART for adolescents living with HIV. The proposed research will evaluate the use of peer navigators and long-acting injectable antiretroviral therapy in addition to baseline adolescent-friendly services in a randomized clinical trial and evaluate implementation factors associated with each intervention in multiple settings throughout South Africa.”

Source: [NIH Reporter for PATC³H-IN ATTUNE project](#)

About ATTUNE

Question or comment

Format	Who is asking?	Situation

Two scenarios

About ATTUNE

Plain language impact statement

Format	Who is asking?	Situation
Written statement	A funding agency	Grant proposal

Balancing school, social pressures, **and** the stress of managing a lifelong condition make it very challenging for South African adolescents living with HIV to adhere to daily oral antiretroviral therapy (ART). For this reason, treatment failure and mortality rates among these youth remain high, **but** long-acting injectable ART has the potential to reverse this trend. **In this project**, we will engage peer navigators and adolescent-friendly services to optimize implementation of injectable ART among teenagers in South Africa living with HIV, improving their outcomes and saving countless lives.

About ATTUNE

Why should we donate to your cause?

Format	Who is asking?	Situation
60-s oral pitch	The board of a philanthropic organization	Fundraising event

In South Africa, too many teens living with HIV are still getting seriously ill or dying—even though treatment exists, **and** that is often because daily pills are hard to keep up with. These young people are balancing school, social pressures, stigma, and the daily stress of managing a lifelong condition, **but** there's a better solution: a long-acting injectable treatment that only needs to be taken every few weeks or months. **With your contribution**, we will bring this treatment to teens through peer support and services designed just for them, to help them stay healthy, stay in care, and build brighter futures—while saving lives along the way.

Other ideas?

Questions?

Email us:

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