POLISH NATIONAL AGENCY FOR ACADEMIC EXCHANGE

STER PROGRAMME

Smart Education for Engineering Doctors

Warsaw University of Technology

PhD. Students Office

LECTURE 2

Dariusz Aksamit

www.aksamit.info

This course has been supported by the Polish National Agency for Academic Exchange under the STER Programme

How to understand your audience?

16Personalities

https://www.16personalities.com

Your Results

"THE CAMPAIGNER" (ENFP-A)

DIPLOMAT

PEOPLE MASTERY

81%	EXTRAVERTED	19%
73%	INTUITIVE	27%
33%	FEELING	67%
37%	PROSPECTING	63%
68%	ASSERTIVE	32%

What's Your Personality Type?

Use the questions on the outside of the chart to determine the four letters of your Myers-Briggs type.
For each pair of letters, choose the side that seems most natural to you, even if you don't agree with every description.

1. Are you outwardly or inwardly focused? If you:

- Could be described as talkative, outgoing
- Like to be in a fast-paced environment
- Tend to work out ideas with others, think out loud
- Enjoy being the center of attention

then you prefer

E
Extraversion

- Could be described as reserved, private
- Prefer a slower pace with time for contemplation
- Tend to think things through inside your head
- Would rather observe than be the center of attention

then you prefer

I
Introversion

2. How do you prefer to take in information? If you:

- Focus on the reality of how things are
- Pay attention to concrete facts and details
- Prefer ideas that have practical applications
- Like to describe things in a specific, literal way

then you prefer

S
Sensing

- Imagine the possibilities of how things could be
- Notice the big picture, see how everything connects
- Enjoy ideas and concepts for their own sake
- Like to describe things in a figurative, poetic way

then you prefer

N
Intuition

3. How do you prefer to make decisions? If you:

- Make decisions in an impersonal way, using logical reasoning
- Value justice, fairness
- Enjoy finding the flaws in an argument
- Could be described as reasonable, level-headed

then you prefer

T
Thinking

- Base your decisions on personal values and how your actions affect others
- Value harmony, forgiveness
- Like to please others and point out the best in people
- Could be described as warm, empathetic

then you prefer

F
Feeling

4. How do you prefer to live your outer life? If you:

- Prefer to have matters settled
- Think rules and deadlines should be respected
- Prefer to have detailed, step-by-step instructions
- Make plans, want to know what you're getting into

then you prefer

J
Judging

- Prefer to leave your options open
- See rules and deadlines as flexible
- Like to improvise and make things up as you go
- Are spontaneous, enjoy surprises and new situations

then you prefer

P
Perceiving

ISTJ Responsible, sincere, analytical, reserved, realistic, systematic. Hardworking and trustworthy with sound practical judgment.	**ISFJ** Warm, considerate, gentle, responsible, pragmatic, thorough. Devoted caretakers who enjoy being helpful to others.	**INFJ** Idealistic, organized, insightful, dependable, compassionate, gentle. Seek harmony and cooperation, enjoy intellectual stimulation.	**INTJ** Innovative, independent, strategic, logical, reserved, insightful. Driven by their own original ideas to achieve improvements.
ISTP Action-oriented, logical, analytical, spontaneous, reserved, independent. Enjoy adventure, skilled at understanding how mechanical things work.	**ISFP** Gentle, sensitive, nurturing, helpful, flexible, realistic. Seek to create a personal environment that is both beautiful and practical.	**INFP** Sensitive, creative, idealistic, perceptive, caring, loyal. Value inner harmony and personal growth, focus on dreams and possibilities.	**INTP** Intellectual, logical, precise, reserved, flexible, imaginative. Original thinkers who enjoy speculation and creative problem solving.
ESTP Outgoing, realistic, action-oriented, curious, versatile, spontaneous. Pragmatic problem solvers and skillful negotiators.	**ESFP** Playful, enthusiastic, friendly, spontaneous, tactful, flexible. Have strong common sense, enjoy helping people in tangible ways.	**ENFP** Enthusiastic, creative, spontaneous, optimistic, supportive, playful. Value inspiration, enjoy starting new projects, see potential in others.	**ENTP** Inventive, enthusiastic, strategic, enterprising, inquisitive, versatile. Enjoy new ideas and challenges, value inspiration.
ESTJ Efficient, outgoing, analytical, systematic, dependable, realistic. Like to run the show and get things done in an orderly fashion.	**ESFJ** Friendly, outgoing, reliable, conscientious, organized, practical. Seek to be helpful and please others, enjoy being active and productive.	**ENFJ** Caring, enthusiastic, idealistic, organized, diplomatic, responsible. Skilled communicators who value connection with people.	**ENTJ** Strategic, logical, efficient, outgoing, ambitious, independent. Effective organizers of people and long-range planners.

2. How do you prefer to take in information? If you:

- Focus on the reality of how things are
- Pay attention to concrete facts and details
- Prefer ideas that have practical applications
- Like to describe things in a specific, literal way

then you prefer

S

Sensing

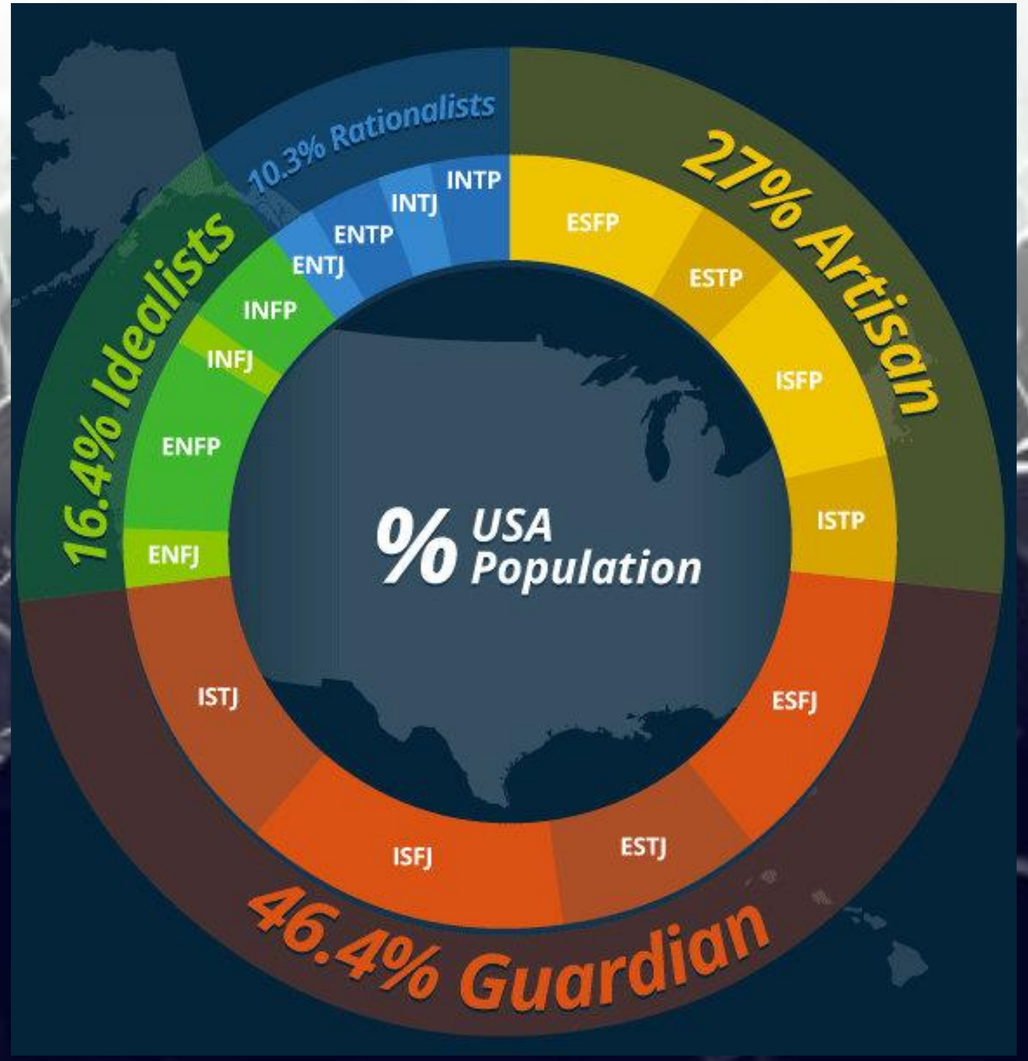
- Imagine the possibilities of how things could be
- Notice the big picture, see how everything connects
- Enjoy ideas and concepts for their own sake
- Like to describe things in a figurative, poetic way

then you prefer

N

Intuition

„KNOW YOUR AUDIENCE”



MY life experience, knowledge, competenteces, interests

AUDIENCE – THEIR interests, knowledge, education

MY life experience, knowledge, competenteces, interests

AUDIENCE – THEIR interests, knowledge, education

We take people on a travel from a place they know

SO WHAT?

MY life experience, knowledge, competenteces, interests

AUDIENCE – THEIR interests, knowledge, education

We take people on a travel from a place they know

We communicate to give something to their world

MY life experience, knowledge, competenteces, interests

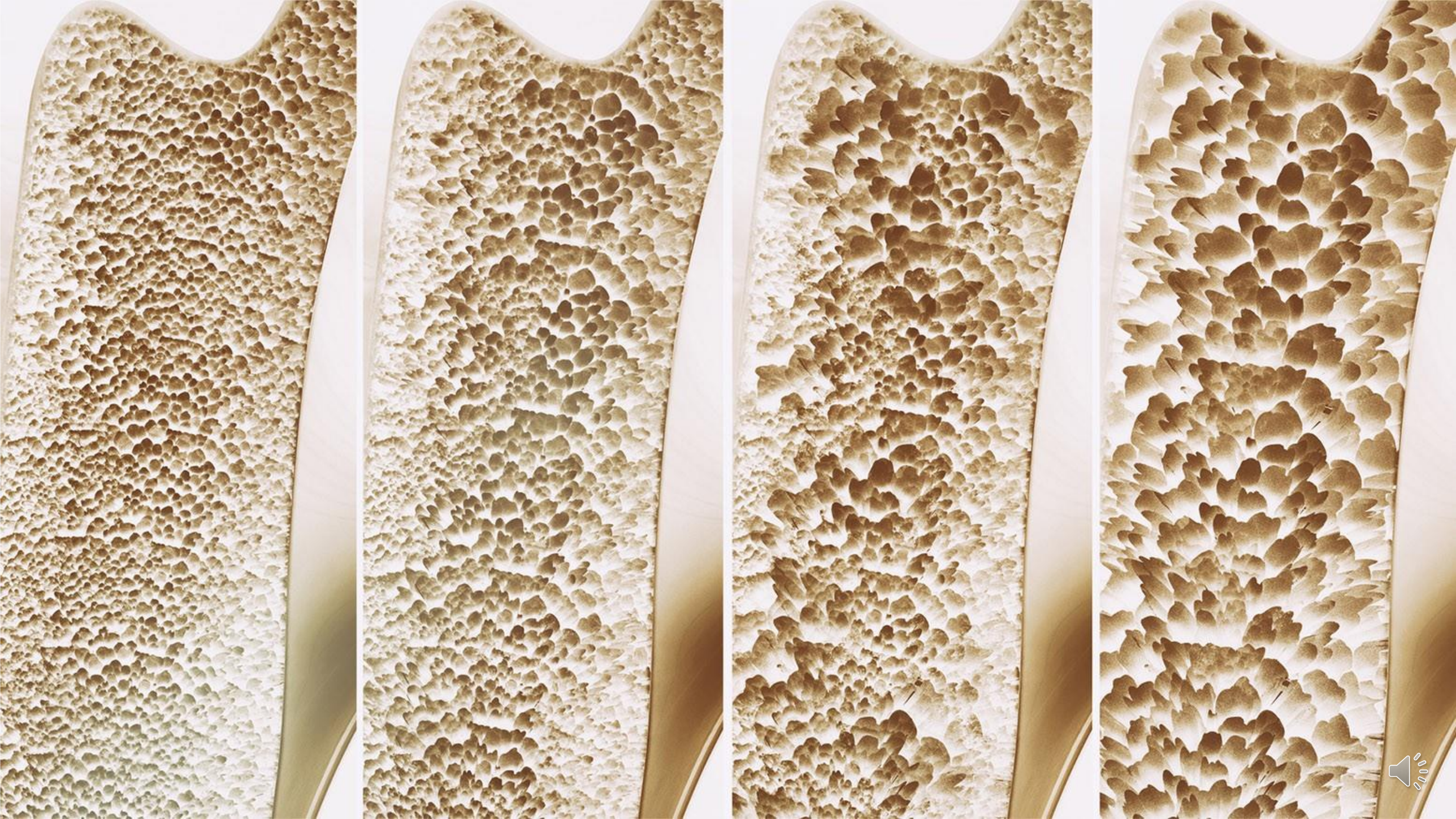
AUDIENCE – THEIR interests, knowledge, education

It’s how actually it often looks like in academia…

EXERCISE

Identify „actors” - their needs and role to play

- WHO is interested in this topic?
- WHY are they (or should they be) interested?
- WHAT can they do about it? What you encourage them to do?
- WHAT kind of argumentation are you going to use?



Identify „actors” - their needs and role to play

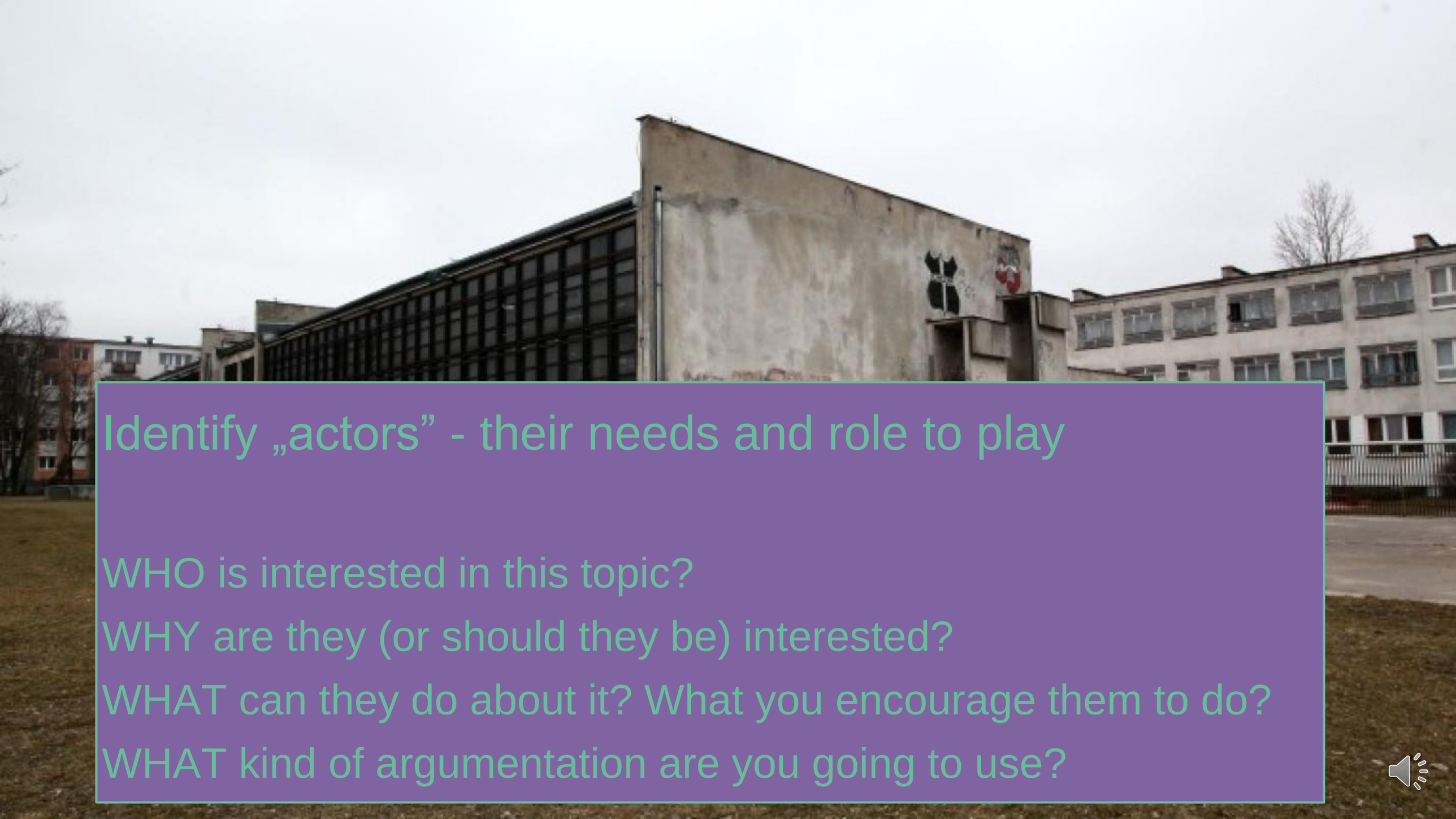
WHO is interested in this topic?

WHY are they (or should they be) interested?

WHAT can they do about it? What you encourage them to do?

WHAT kind of argumentation are you going to use?


Sportowy Tydzień Życia Chojny



Identify „actors” - their needs and role to play

WHO is interested in this topic?

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WHAT can they do about it? What you encourage them to do?

WHAT kind of argumentation are you going to use?


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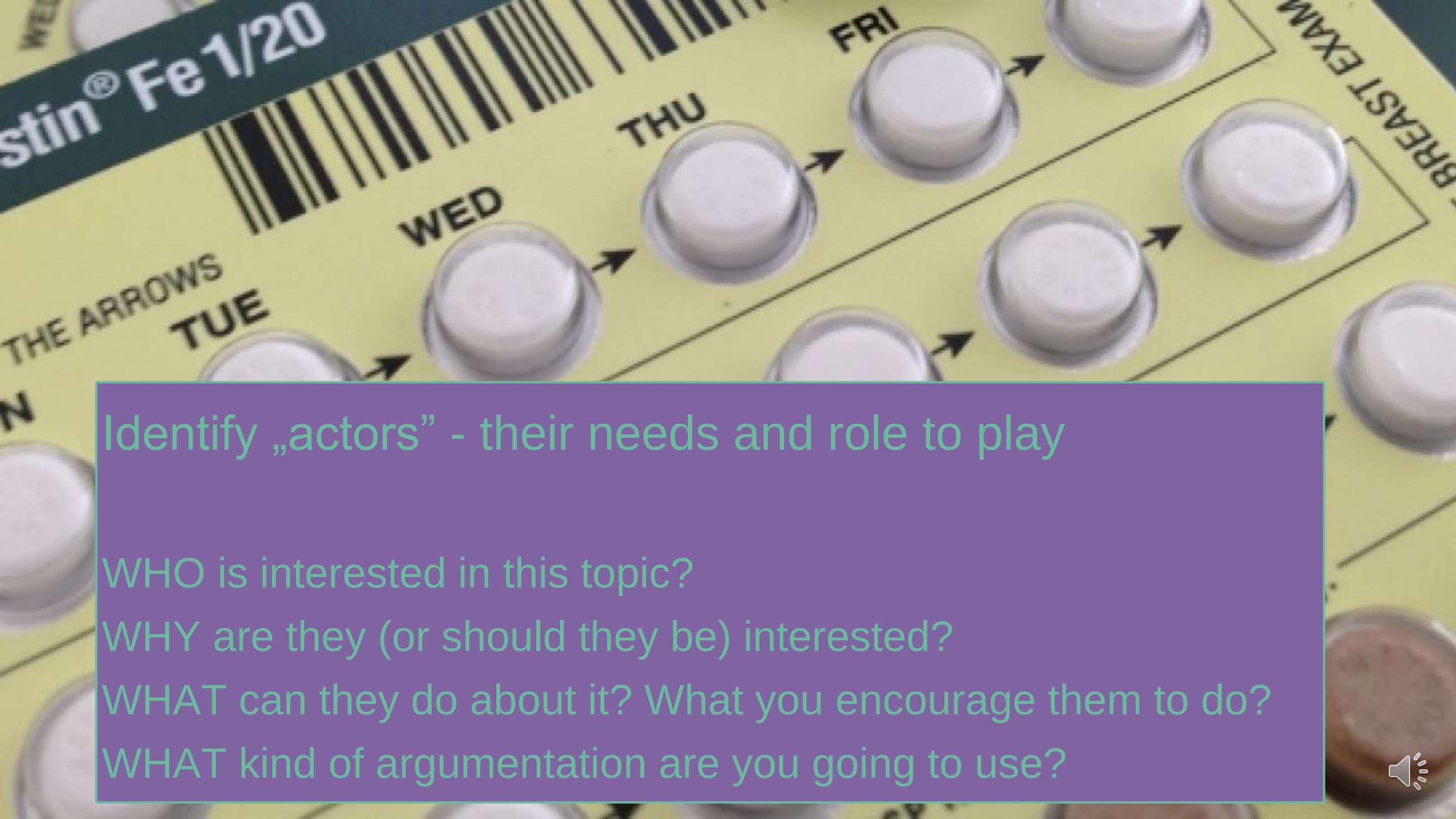


Identify „actors” - their needs and role to play

WHO is interested in this topic?

WHY are they (or should they be) interested?

WHAT can they do about it? What you encourage them to do?

WHAT kind of argumentation are you going to use?

https://www.compasscicomm.org/the-message-box-workbook

The "So What?" Prism. Adapted from *Escape from the Ivory Tower: A Guide to Making Your Science Matter*, by Nancy Baron (Island Press, 2010).

FOR WHO….?

Fotographic - motive

biologist - sample

Whole year

child - toy

poet - inspiration

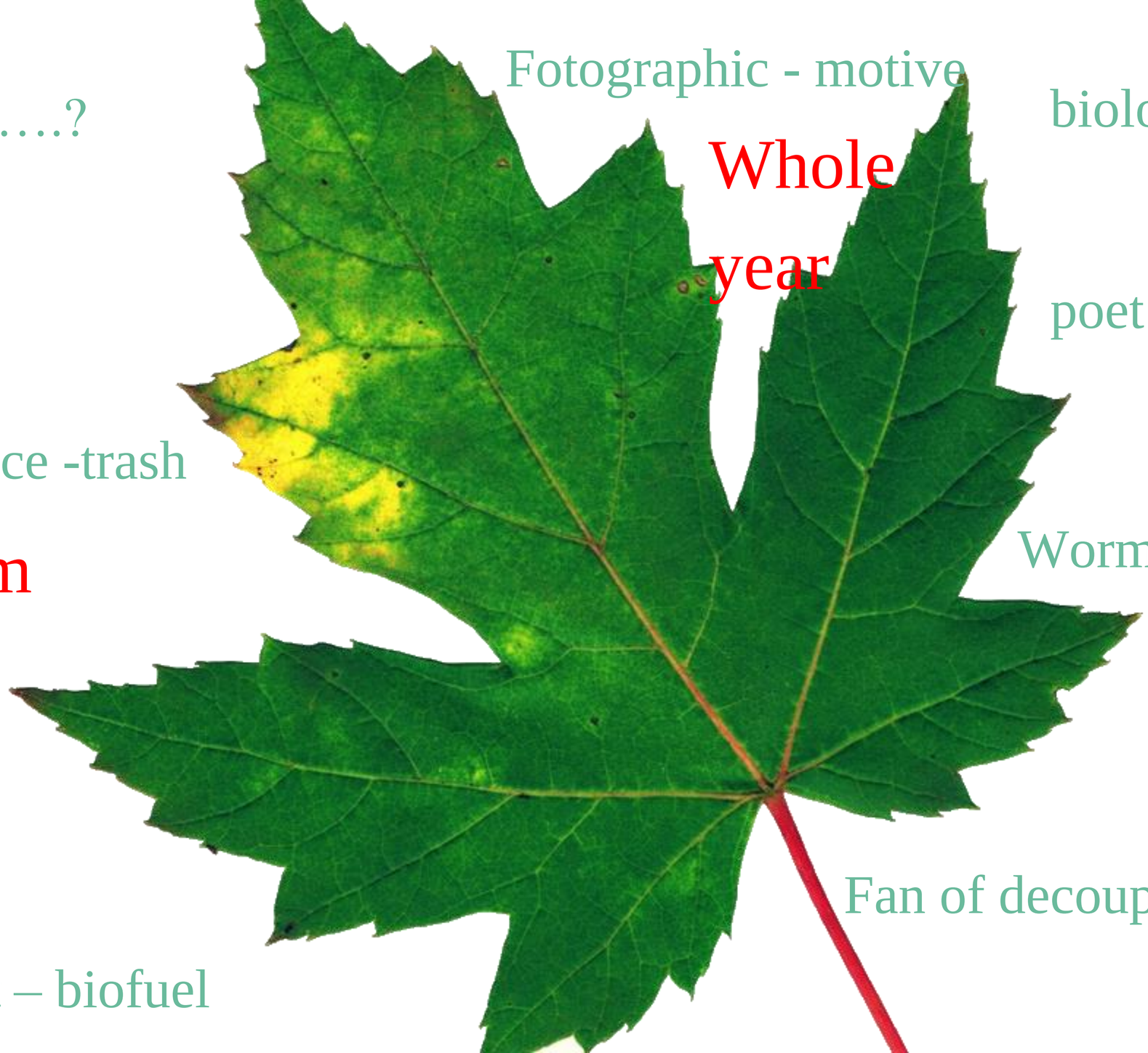
Cleaning service -trash

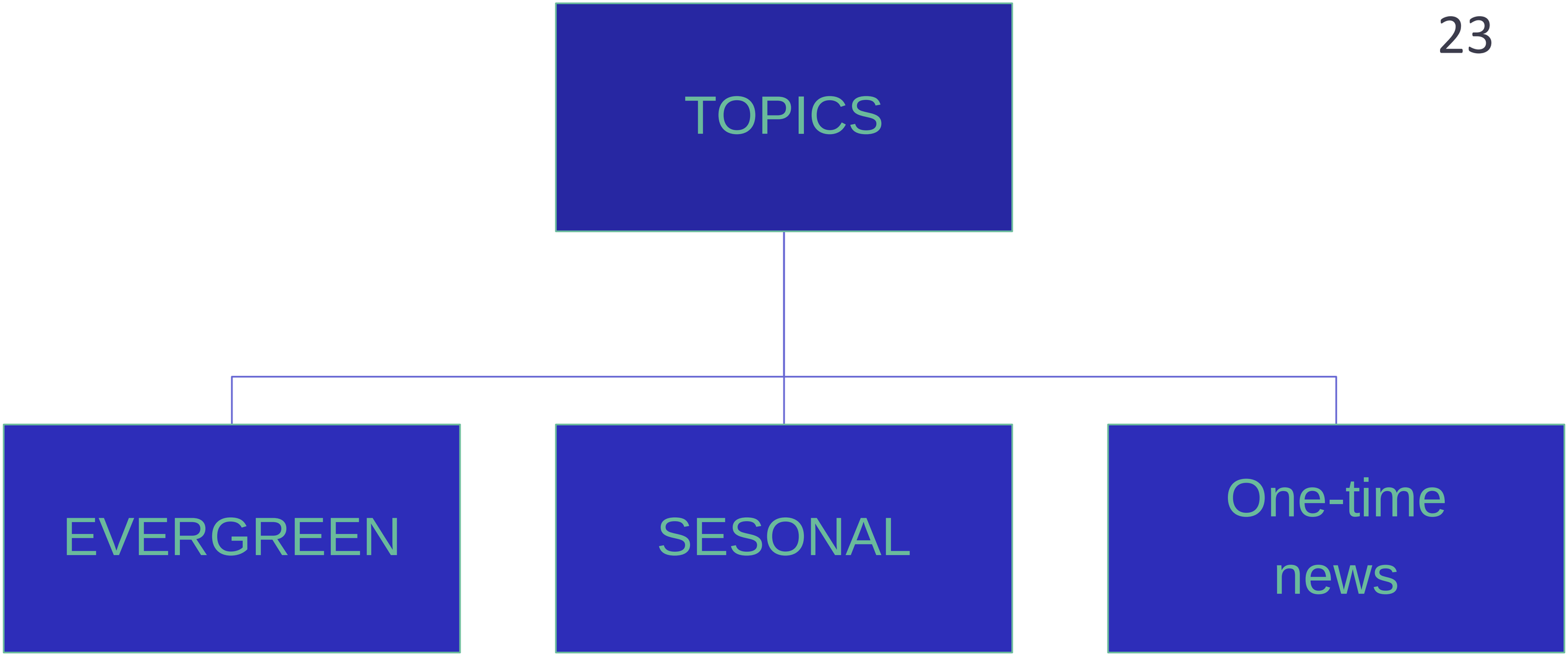
Autum

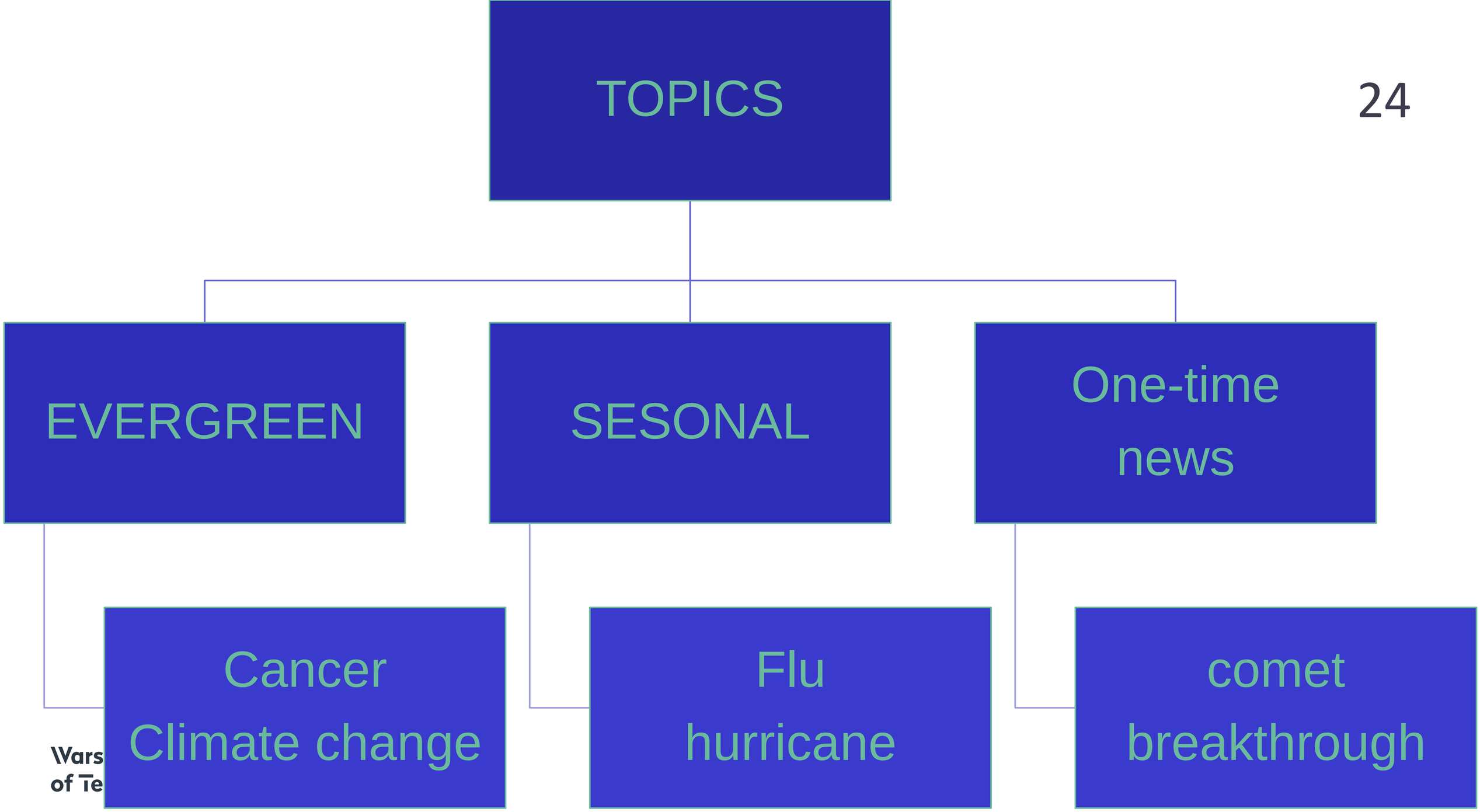
Worm - food

Fan of decoupagu - tool

biotechnologist – biofuel




TOPICS
EVERGREEN
SESONAL
One-time news


TOPICS
EVERGREEN
SESONAL
One-time news
Cancer
Climate change
Flu
hurricane
comet
breakthrough

https://www.youtube.com/watch?time_continue=12&v=OWJCfOvochA&feature=emb_logo

TASK „5 levels”

Prepare a short description of your research on „5 levels”

When you do do „science communication”?

Naming

Science communication?

Naming

scientific communication

science communication

scholarly communication

Science Communication

Scientific Communication

Scholarly Communication

So:

- WHO is talking?
- TO WHO is talking?
- WHY is talking??

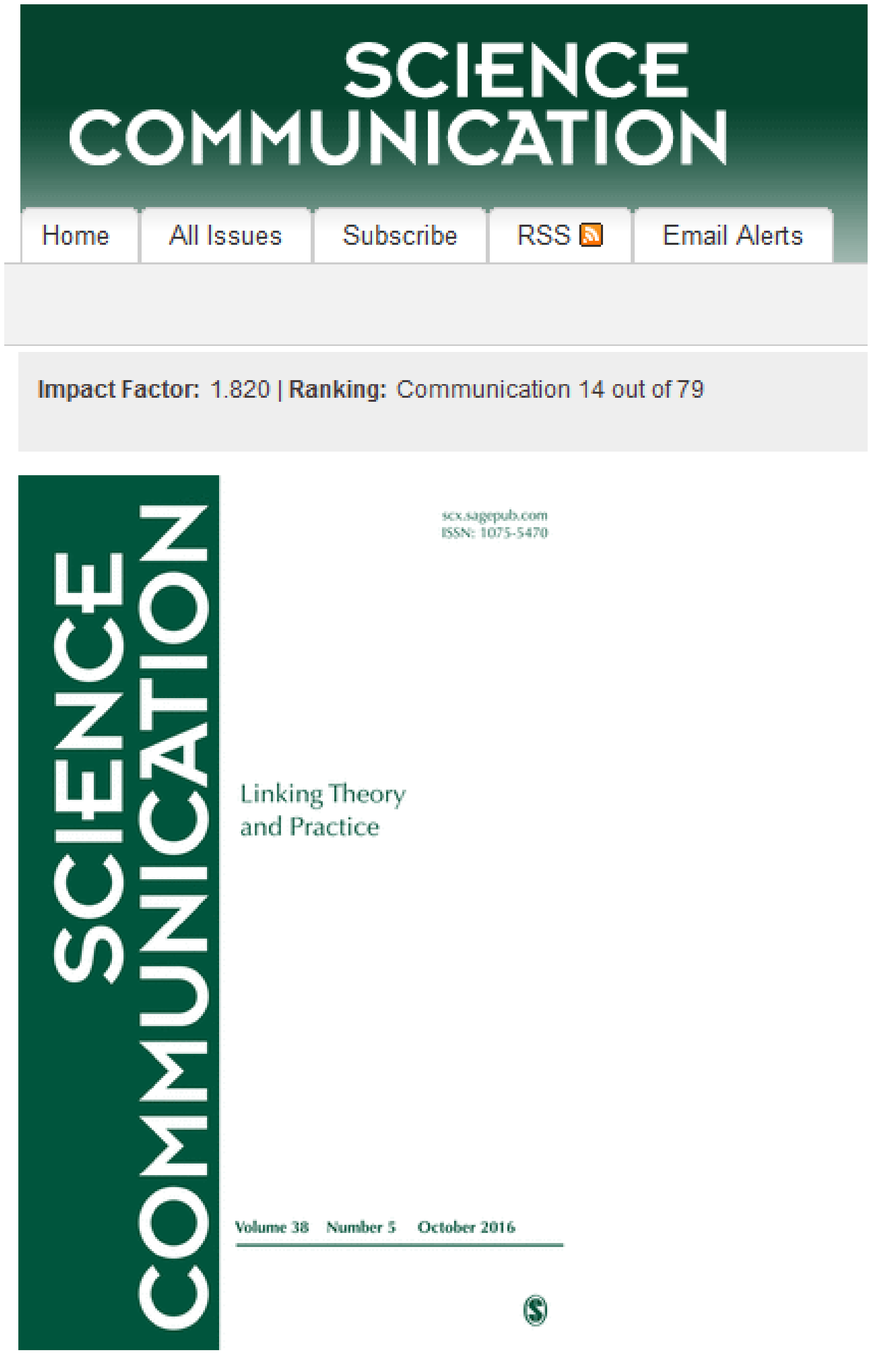
Popularisation (science journalist, educator…)

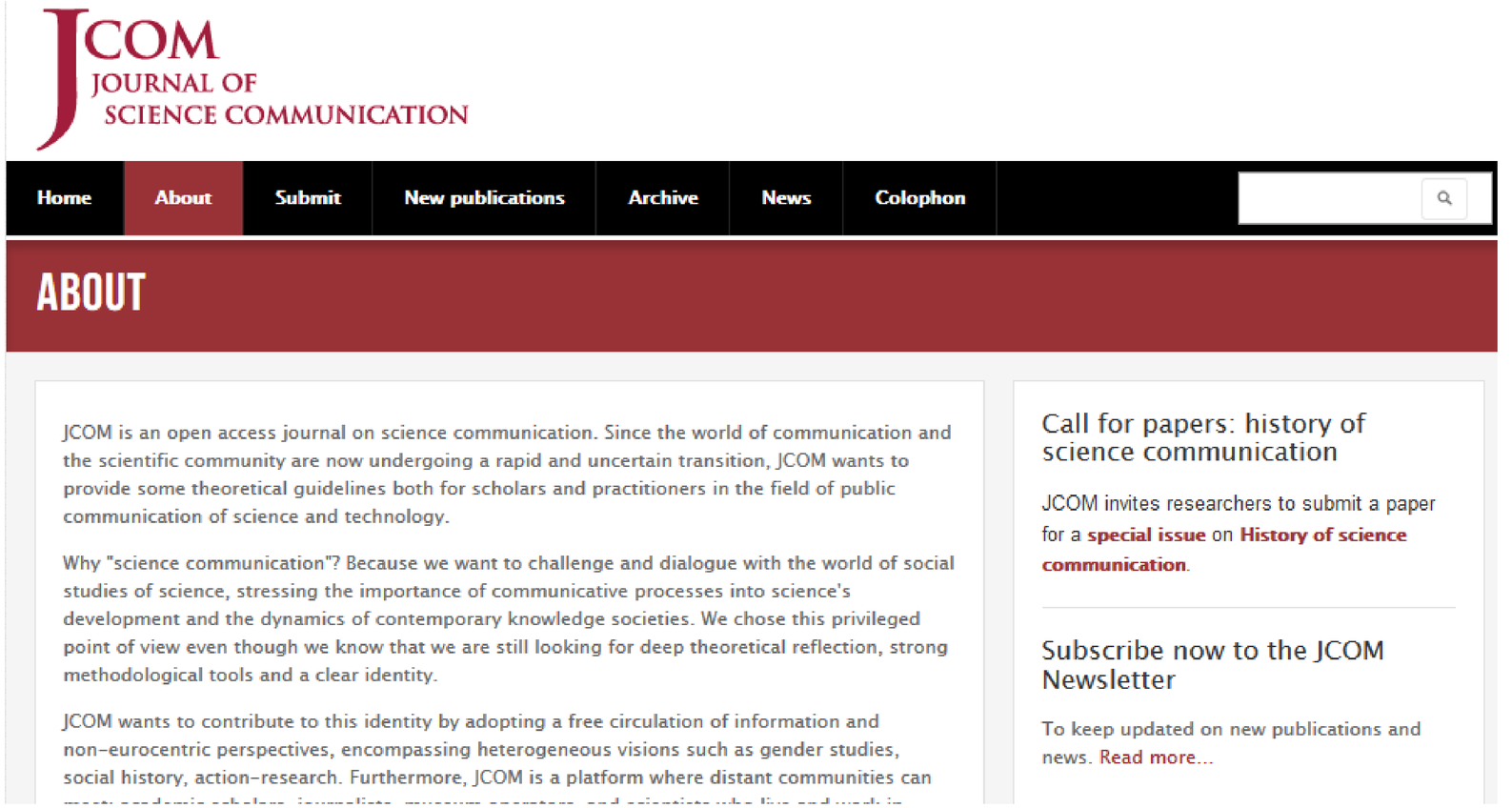
Education (formalna, informal, non-formal…)

Promotion of results

Science communications: outreach / dissemination

Science of science communication





„…diffusion of knowledge…"

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Edited by: Susanna Hornig Priest, Ph.D.
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ISSUE 05, 2016

21/09/2016

Trust, advertising and science communication

Editorial

Emma Weitkamp

This issue of JCOM presents some interesting challenges relating to trust and the media ecology that supports science communication. Weingart and...

17/08/2016

How advertising and sustainability dialog in Pan-Amazonia: the perspective of advertising professionals in Peru and Brazil

Article

Marcio Silva, Ligia Simonian

In this article it is investigated the relationship between advertising and sustainability by evaluating the perceptions of employees of advertising...

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Edited by Massimiano Bucchi (University of Trento, Italy)

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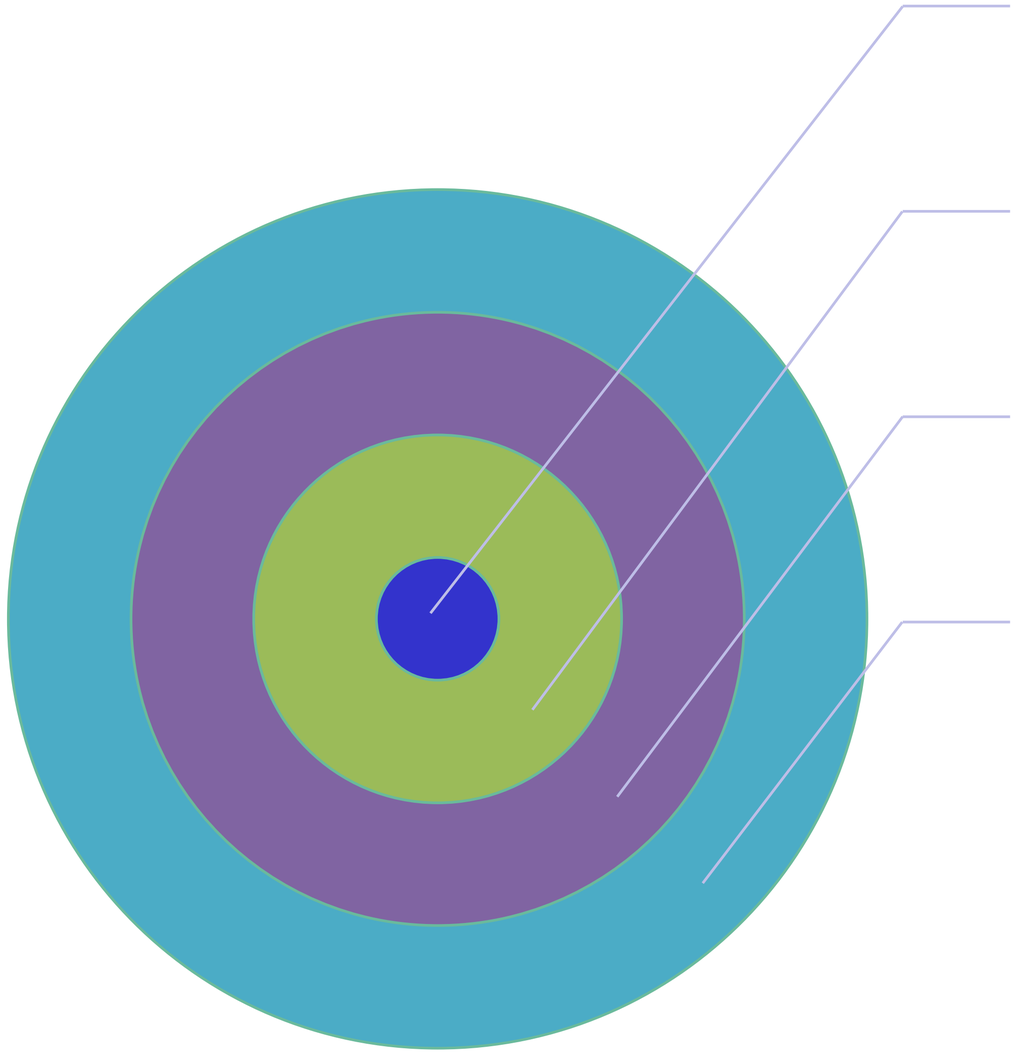
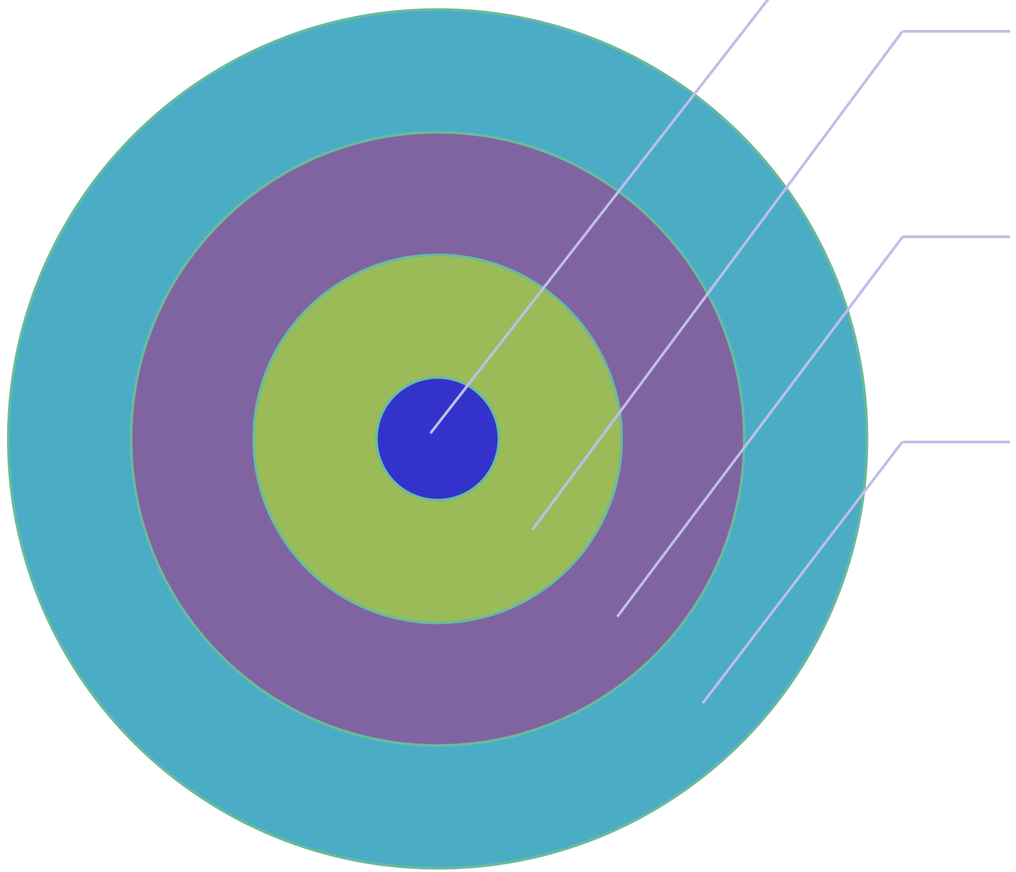


Stages/levels of science communication

How many people know/heard the topic?

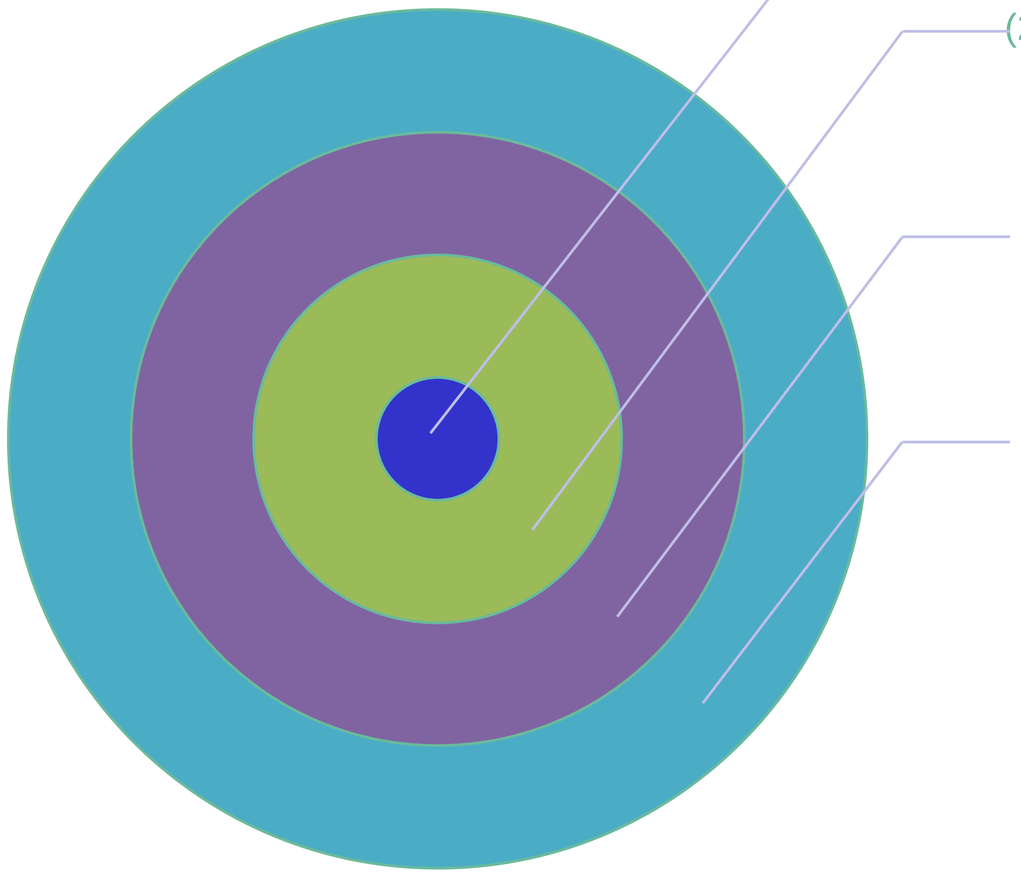


– information about exepiments and empirical data

Warsaw University of Technology

Classification by: Michel'a Cloître oraz Terry'ego Shinn'a

How many people know/heard the topic?



(1) intraspecialistic

– information about exepiments and empirical data

(2) *interspecialistic*

– interdisciplinary papers

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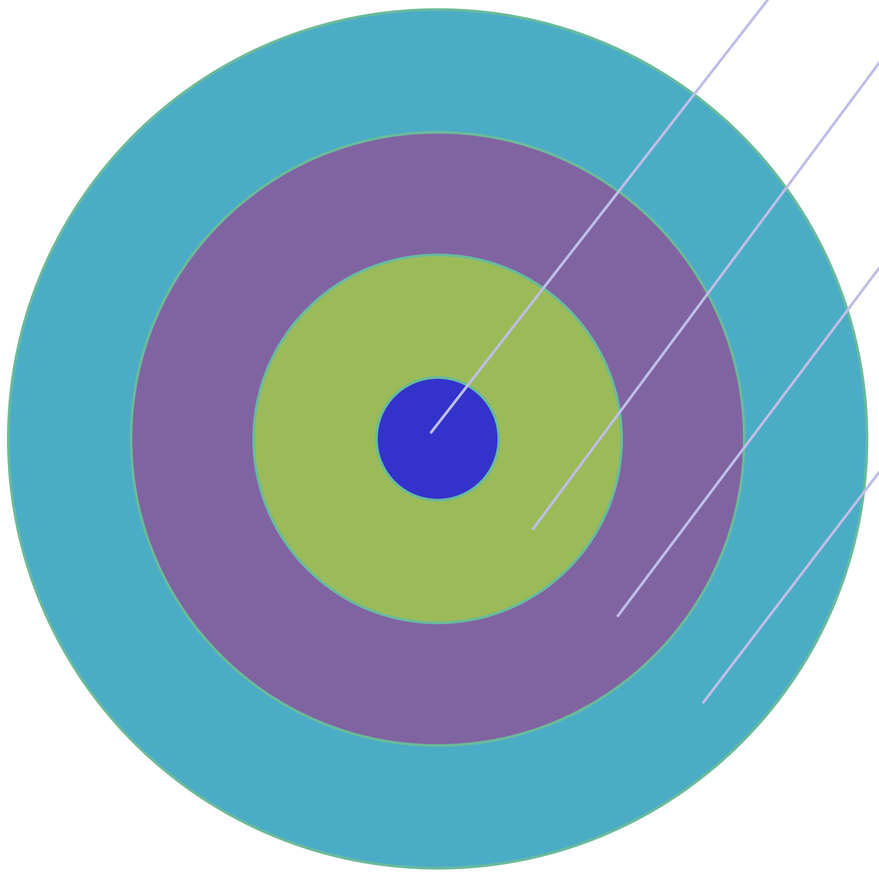
How many people know/heard the topic?



(1) intraspecialistic

– information about exepiments and empirical data

(2) *interspecialistic*

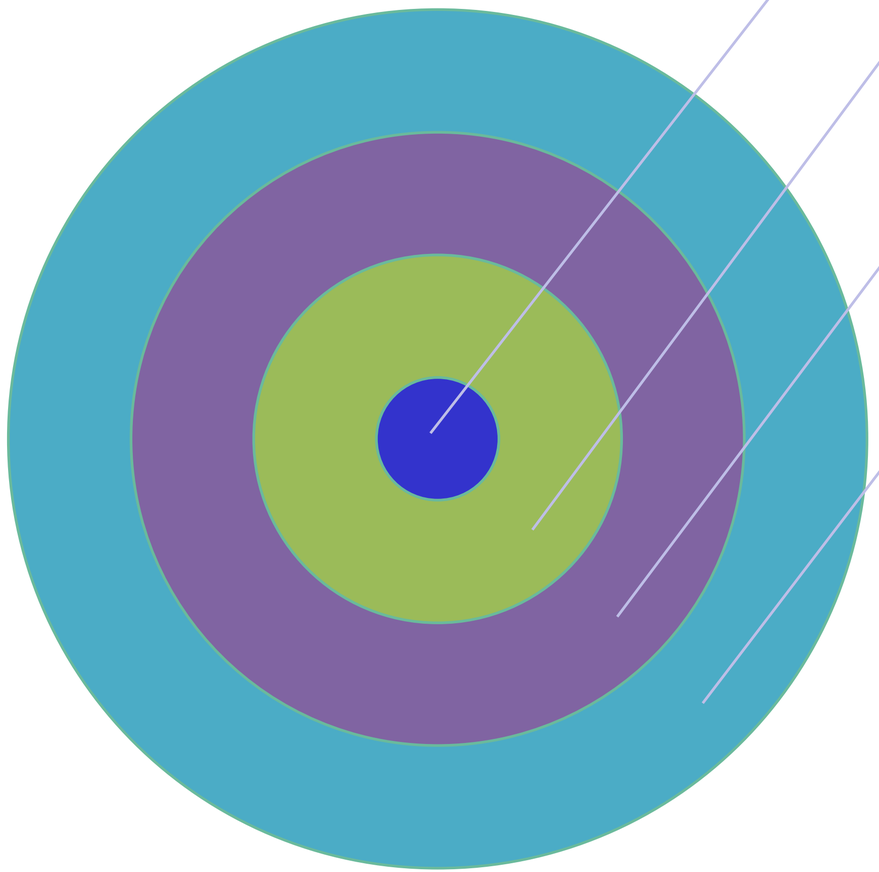
– interdisciplinary papers

(3) pedagogical

- handbooks, courses

Classification by: Michel'a Cloître oraz Terry'ego Shinn'a

How many people know/heard the topic?



(1) intraspecialistic

– information about exepiments and empirical data

(2) *interspecialistic*

– interdisciplinary papers

(3) pedagogical

- handbooks, courses

(4) *popular*

– popular articles, daily press, documental films, cinema (NETFLIX:D)

Classification by: Michel'a Cloître oraz Terry'ego Shinn'a

Public speaking

#UnderstandAndBeUnderstood

How to speak, to be ~~listend~~?

Understood?

1. Adjust language

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About difficulty of text

Is it possible to measure how difficult a text is?

- What does it mean „difficult”?
- Difficult for who?
- How to measure?

FOG index

$$FOG = 0{,}4\left(\frac{nuber\ of\ words}{number\ of\ sentences} + 100\frac{number\ of\ long\ words}{nubmer\ of\ words}\right)$$

Fog Index	Reading level by grade
17	College graduate
16	College senior
15	College junior
14	College sophomore
13	College freshman
12	High school senior
11	High school junior
10	High school sophomore
9	High school freshman
8	Eighth grade
7	Seventh grade
6	Sixth grade

Tools for checking text readability?

JASNOPIS

STRONA GŁÓWNA | APLIKACJA | KSIĄŻKA | ZESPÓŁ | KONTAKT

Jasnopis

Lubię to!

Wiele tekstów, z którymi spotykamy się na co dzień – od aktów prawnych po ulotki informacyjne i instrukcje obsługi urządzeń – jest formułowanych tak, że często mamy poważne kłopoty z ich zrozumieniem. A przecież wystarczyłoby czasem skrócić zdania, uprościć słownictwo czy zastąpić trudne konstrukcje prostszymi, by tekst stał się zrozumiały dla większości odbiorców.

Jasnopis jest narzędziem informatycznym, które potrafi zmierzyć zrozumiałość tekstu, wskazać jego trudniejsze fragmenty i zaproponować poprawki. Zapraszamy na jego prezentację.

https://readabilityformulas.com/freetests/six-readabil

Readability Consensus

Based on (7) readability formulas, we have scored your text:

Grade Level: 8
Reading Level: fairly easy to read.
Reader's Age: 12-14 yrs. old (Seventh and Eighth graders)

Flesch Reading Ease score: 71.3 (text scale)
Flesch Reading Ease scored your text: fairly easy to read.
[f] | [a] | [r]

Gunning Fog: 10.2 (text scale)
Gunning Fog scored your text: fairly easy to read.
[f] | [a] | [r]

Flesch-Kincaid Grade Level: 7.9
Grade level: Eighth Grade.
[f] | [a] | [r]

The Coleman-Liau Index: 7
Grade level: Seventh Grade
[f] | [a] | [r]

The SMOG Index: 6.8
Grade level: Seventh Grade
[f] | [a] | [r]

Automated Readability Index: 7.3
Grade level: 11-13 yrs. old (Sixth and Seventh graders)
[f] | [a] | [r]

Linsear Write Formula : 9.5
Grade level: Tenth Grade.
[f] | [a] | [r]

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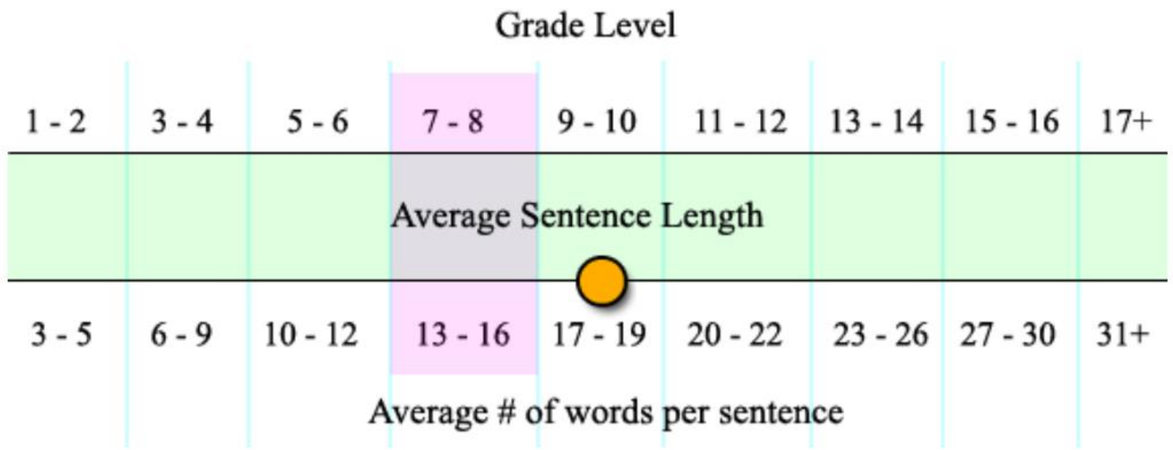

(Green color) = Name of graph

(Pink color) = U.S. average grade level.

= Your text

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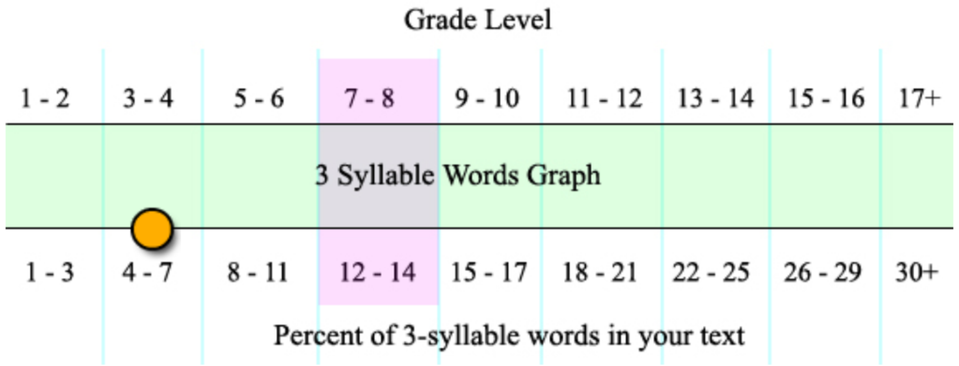


(Green color) = Name of graph

(Pink color) = U.S. average grade level.

= Your text

The average percent of 3-syllable words for U.S. high school and adult readers is between 12-14%. The percent of 3-syllable words in your text is 7%.

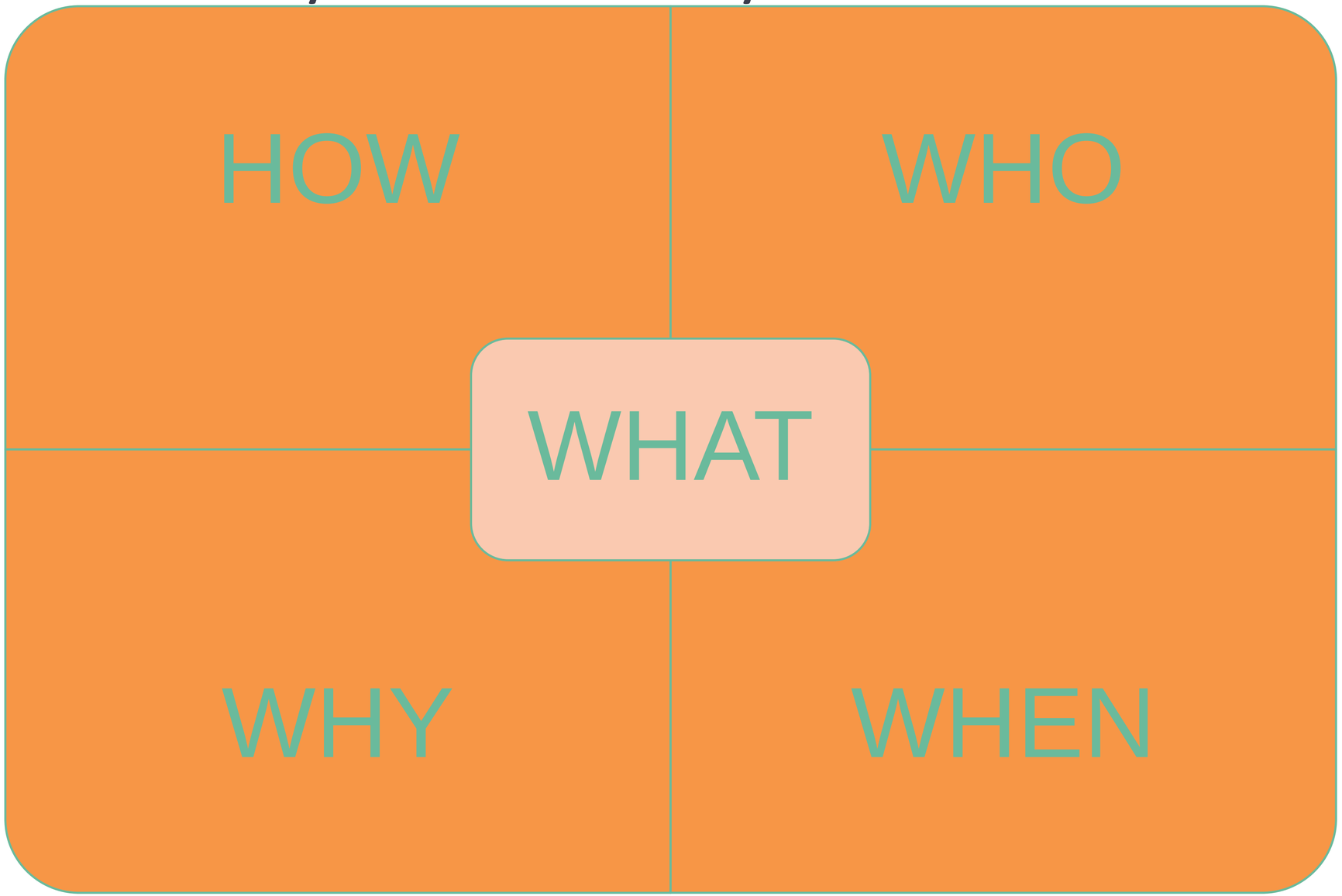
Task

Check yours text like an abstract of your master thesis and check its readability. Probably it’ll be very high – make some changes to reduce its complexity!

Identify „hard” words in your topic:

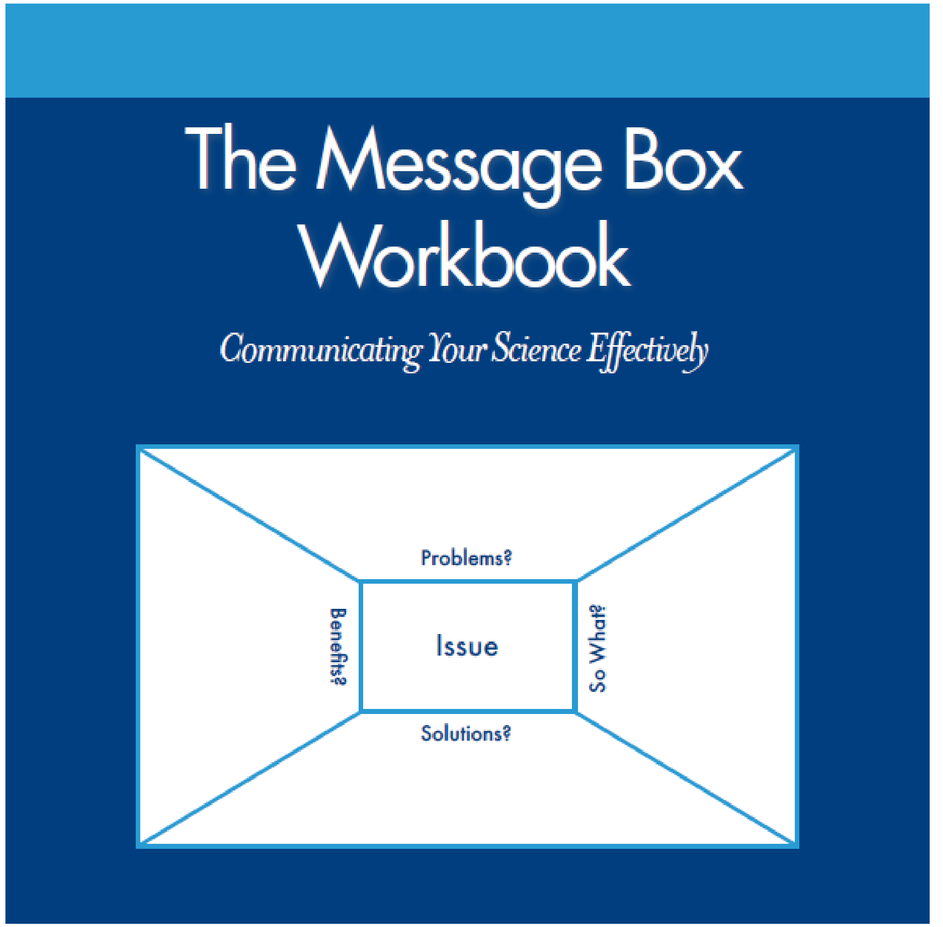
- Wonder if they are really necessary
- If not – get rid of them:)
- If yes - prepare short and simple (!!!) explanation of each. Then test it on friends of relatives outside the academic world

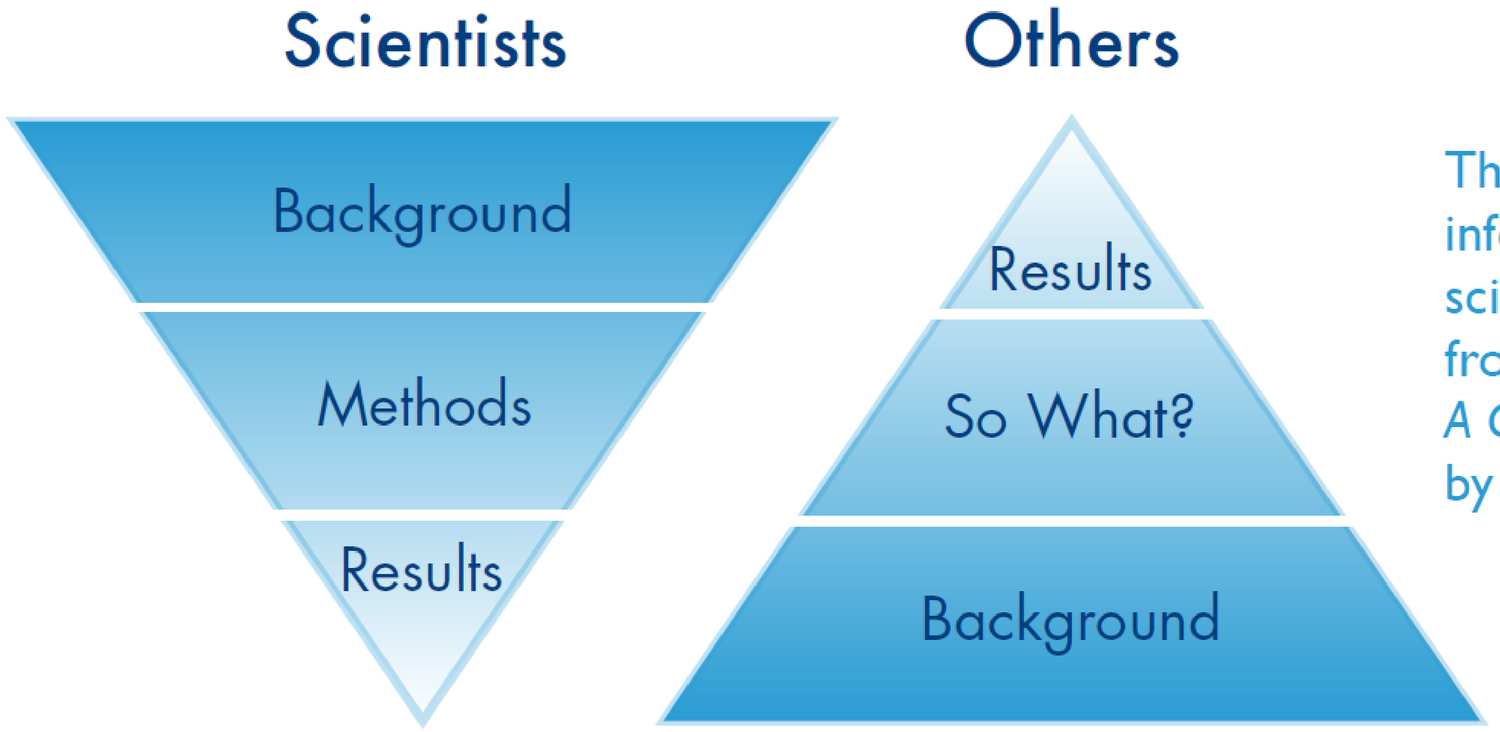
2. ORGANISE -> What do you want to say?



https://www.compasscicomm.org/the-message-box-workbook

COMPASS





The scientific method of presenting information, versus what non-scientists want to know. Adapted from *Escape from the Ivory Tower: A Guide to Making Your Science Matter*, by Nancy Baron (Island Press, 2010).

J. Mar. Biol. Ass. U.K. (2004), 84, 943–947
Printed in the United Kingdom

Distichopora robusta sp. nov.: the first shallow-water stylasterid (Cnidaria: Hydrozoa: Stylasteridae) from the tropical eastern Pacific

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†Department of Zoology, NMNH, Smithsonian Institution, PO Box 37012, W-329, MRC-0163, Washington, DC, 20013-7012, USA.
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E-mail: guzmanh@tivoli.si.edu. Corresponding author

Distichopora robusta, the first shallow-water stylasterid coral from the tropical eastern Pacific, is described from the west coast of Panama. The new species is distinguished from all species of *Distichopora* described thus far by having robust branches and poorly defined pore rows.

INTRODUCTION

Stylasterid corals comprise about 250 species, making them the second largest group of calcified cnidarians, only the Scleractinia having more species (i.e. 1500; Cairns, 1999; Cairns *et al.*, 1999). They are distributed worldwide in both deep and shallow-water marine environments, but most species occur in deep water (depths of 200–500 m (Cairns, 1982)). Most tropical shallow-water species currently assigned to either *Stylaster* or *Distichopora*, most form branching, tree-like colonies 5 to 25 cm tall and are remarkable for their bright colours, including violet, red, yellow and orange. These shallow-water species are abundant mostly in the Indo-West Pacific with only two species—*Stylaster blattus* (Boschma, 1961) and *Stylaster miaceus* (Greeff, 1886)—occurring in the eastern Atlantic and a single species (*Stylaster roseus* (Pallas, 1766))—found in the western Atlantic.

The first descriptions of shallow-water stylasterids were those of the western Atlantic *Stylaster roseus* and the Indo-Pacific *Distichopora violacea* (Pallas, 1766). Subsequently, about a dozen additional shallow-water species of *Distichopora* were described from the Indo-West Pacific. This number was greatly reduced by Boschma (1959), who recognized only four valid shallow-water species of *Distichopora* (plus two doubtful species). The most widespread of these species, *Distichopora violacea*, ranges from the Seychelles, East Africa, through the Indian Ocean to the central Pacific. Thus far, only for the eastern Pacific have tropical shallow-water stylasterid corals not been described.

Here, we describe *Distichopora robusta* sp. nov., the first tropical shallow-water stylasterid known from the eastern Pacific. Collected off the coast of Panama, this new species has robust branches and ill-defined pore rows, the latter being traditionally considered as the most important diagnostic characteristic of *Distichopora* (Cairns, 1983).

MATERIALS AND METHODS

Colonies of *Distichopora robusta* sp. nov. were collected at depths of 5 to 25 m on the south side of Isla Jicarita, Gulf of Chiriqui, western coast of Panama. Colonies were preserved in 95% ethanol or kept dried, and were studied using methodology as described by Cairns (1983). Abbreviations for museums are: MZUSP (Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil); RMNH (Nationaal Natuurhistorisch Museum, Leiden, The Netherlands); USNM (National Museum of Natural History, Smithsonian Institution, Washington, DC, USA).

SYSTEMATICS

Class HYDROZOA
Order FILIFERA
Suborder HYDRACTINOIDEA
Family STYLASTERIDAE Gray, 1847
Genus *Distichopora* Lamarck, 1816
Distichopora robusta sp. nov.
(Figures 1 & 2)

Type material. Holotype: female colony, dried, and scanning electron microscope (SEM) stubs 1066–1067 (south side of Isla Jicarita, Gulf of Chiriqui, Panama; water depth: ~12 m) [USNM 1020570]. Collected by Hector M. Guzman, 29 August 2002.

Paratypes: male colony, dried (south side of Isla Jicarita, Gulf of Chiriqui, Panama; water depth: 5–25 m) [RMNH Coel. 32150]. Collected by Carlos A. Guevara, 7 February 2003. Female colony, dried (south side of Isla Jicarita, Gulf of Chiriqui, Panama; water depth: 5–25 m) [MZUSP 1071]. Collected by Carlos A. Guevara, 7 February 2003.

Additional paratypes: 2 male and 3 female colonies, dried, SEM stubs 1068–1070, and 33 fragments in ethanol (south side of Isla Jicarita, Gulf of Chiriqui, Panama;

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Title
Abstract
Background
Methods
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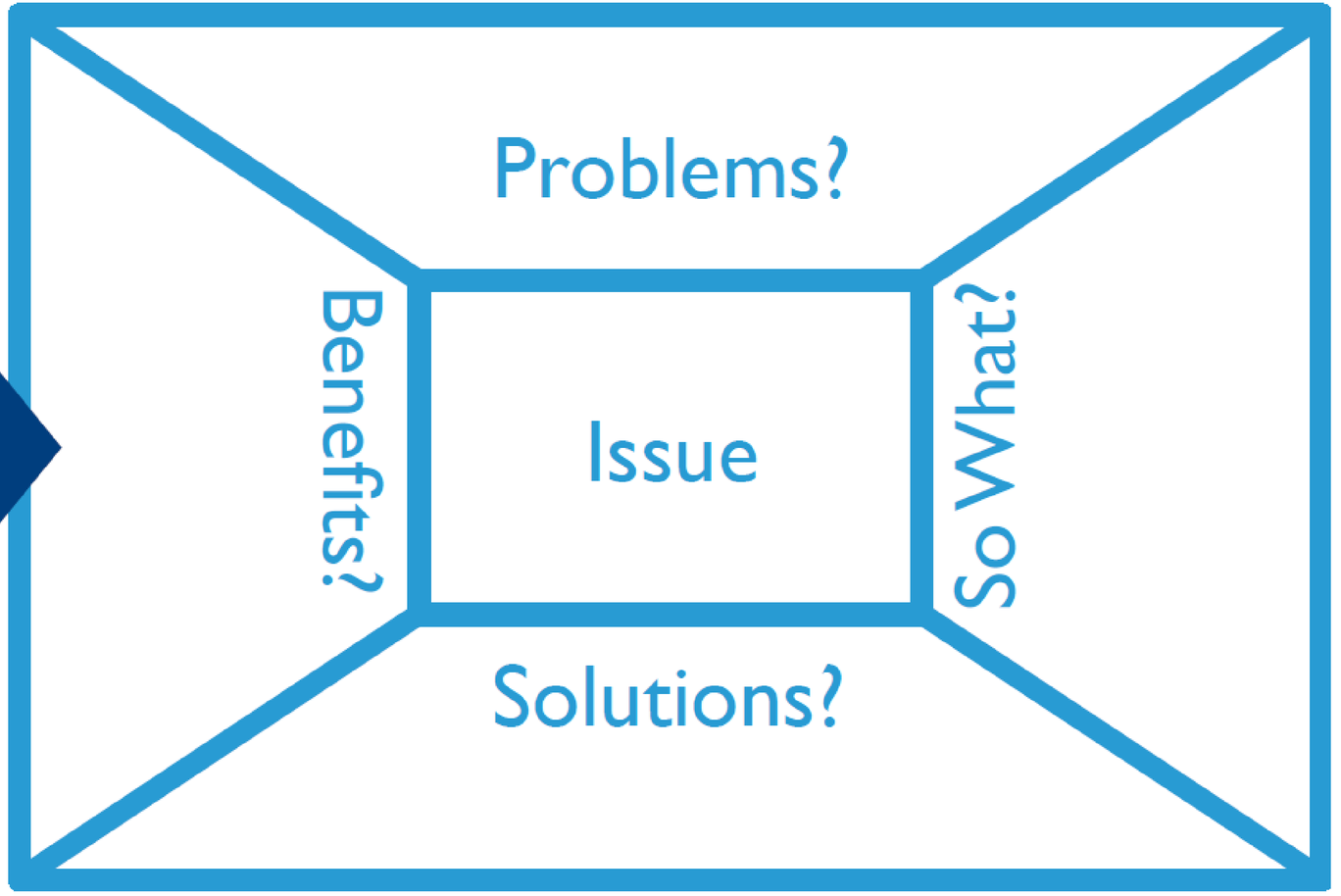

Audience: Who is impacted by this? Who can change this? Who cares about this?