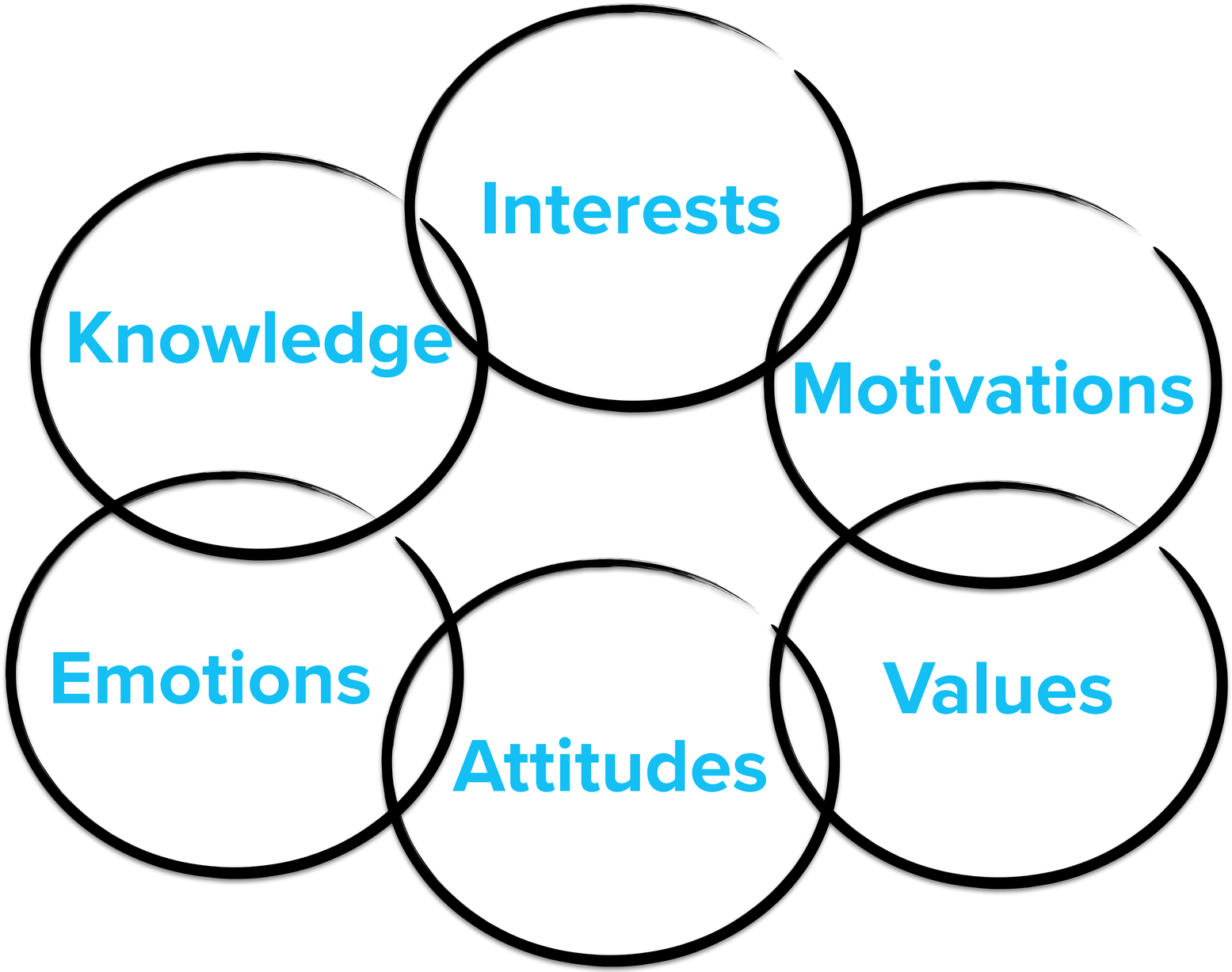
SIMONA CERRATO | 15 OCTOBER 2021

SCIENTIFIC COMMUNICATION TECHNIQUES: US AND THEM

PUBLIC PERCEPTION OF SCIENCE AND TECHNOLOGY


Who is the public?
Or, better, who are the publics?

TO WHOM AM I COMMUNICATING?
HOW WILL MY MESSAGE BE
UNDERSTOOD?
RECEIVED?
INTERPRETED?
WILL MY PUBLIC BE INTERESTED?


Interests
Knowledge
Motivations
Emotions
Attitudes
Values


You don’t want this...

rather...

TRUST

ABOUT YOUR PUBLIC

- age
- gender
- class
- education
- attitudes
- motivations
- what they know already
- expectations
- etc.

WHAT DO EUROPEANS THINK ABOUT SCIENCE?

→ EUROBAROMETER N.516 SEPTEMBER 2021

- 86% think that the overall influence of science and technology is positive
- they expect positive effects from technologies

92% solar energy

86% vaccines and combatting infectious diseases

61% artificial intelligence

https://europa.eu/eurobarometer/surveys/detail/2237

European Commission

What Europeans think about science and technology

Special Eurobarometer 516

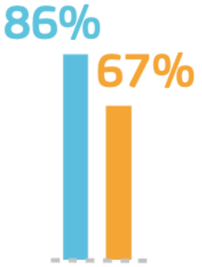
Interest and knowledge

Being interested in and feeling informed about science and technology

EU citizens are interested in various fields...

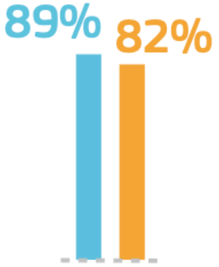
But interest does not always translate to feeling informed

New medical discoveries



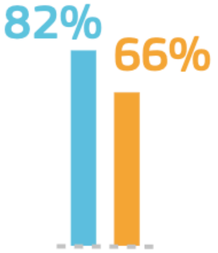
Interested (+4 points since 2010) Informed (+2 points since 2010)

Environmental problems



Interested (+1 point since 2010) Informed (+4 points since 2010)

New scientific discoveries and technological developments



Interested (+3 points since 2010) Informed (+5 points since 2010)

Sources of information about scientific and technological developments

Respondents get most of their information about science and technology from...

63% Television (TV set or via the internet)

29% Online social networks and blogs

14% Radio, including podcasts

13% Online encyclopaedias e.g. Wikipedia

EU citizens think the following are most qualified to explain the impact of scientific and technological developments:

61% Scientists working in the public sector

40% Scientists working in the private sector

29% Doctors

19% Journalists

16% Environmental protection associations

How citizens engage with science and technology

59% **watch documentaries**, or read science and technology-related publications, magazines or books

55% talk about science and technology-related issues **with family or friends**

33% visit science and technology **museums**

19% **sign petitions** or **join demonstrations** on science and technology matters

14% attend **public meetings or debates** about science and technology

12% actively **take part** in scientific projects

8% contact **public authorities or political leaders** about science and technology-related issues

What EU citizens think of scientists

The characteristics that best describe them

- Intelligence 89%
- Reliability 68%
- Collaborative 66%
- Honesty 58%
- Knowing best what is good for people 47%
- Altruism 40%
- Bad at communicating 38%
- Arrogance 28%
- Narrow mindedness 23%
- Immorality 16%

The qualities they'd like to see

- 50% Intelligence
- 43% Honesty
- 39% Reliability
- 34% Morality
- 27% Ability to work together
- 26% Open-mindedness
- 25% Know what is good for people
- 16% Communicate well
- 12% Altruism
- 8% Modesty

Opinions on the role of scientists in society

68%

say that **scientists should intervene in political debate** to ensure that decisions take into account scientific evidence

51%

say that scientists **do not spend sufficient time meeting people** to explain their work

45%

say that scientists **should be held accountable for the misuse** of their discoveries

Inclusion and social responsibility in science and technology

EU citizens and gender equality

55%
say gender equality is **important** for them personally

And when it comes to promoting gender equality in the workforce....

47%
say gender equality would help us live in **a fairer and more equal society**

46%
say gender equality would **improve the outcomes of science and technology**

43%
say gender equality would improve **business profits and the economy**

EU citizens and social responsibility in science and technology

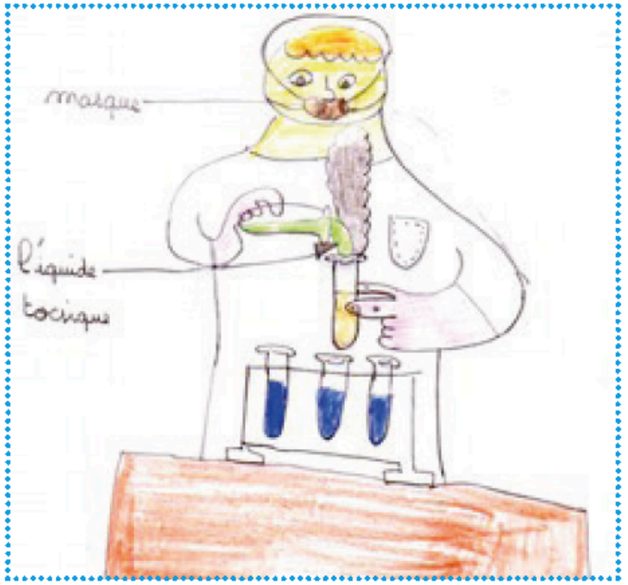
79%
say that the government should **make private companies tackle climate change**

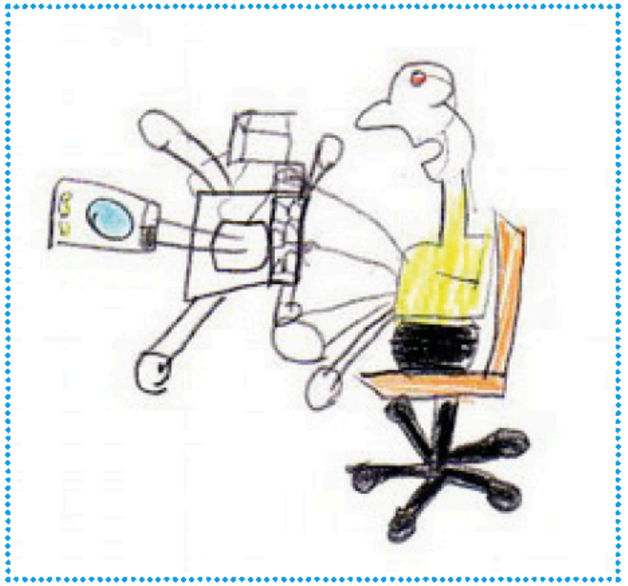
78%
say that **the needs of all groups of people should be considered** when developing new solutions and products

72%
say that the government should take responsibility to ensure that **new technologies benefit everyone**

Source: Special Eurobarometer 516 – "European citizens' knowledge and attitudes towards science and technology" Fieldwork: April – May 2021, sample: EU27 data (26,827 respondents)

ATTITUDINAL GROUPS





Scientists drawn by European children (source: SEDEC project)

5 MAIN ATTITUDES

- **Confident:** very interested in science and shows the most positive attitude
- **Sceptical enthusiast:** positive towards science, but sceptical about authority
- **Less confident:** science is too difficult for people like themselves
- **Distrustful:** don’t think that science is particularly beneficial
- **Indifferent:** science is something necessary but they don’t not understand it and don’t not have strong feelings towards it

Public Attitudes to Science, People Science & Policy, UK 2008

SCHOOLS

WHAT IS YOUR EXPERIENCE IN SCHOOL?

PARTICIPANTS CAN VOTE AT SLIDO.COM WITH #111981

WHAT WOULD YOU LIKE TO BE YOUR IDEAL SCHOOL?

PARTICIPANTS CAN VOTE AT SLIDO.COM WITH #111981

Formal and informal learning

Formal	Informal
Guided by the teacher	Guided by the learners
Dependent on the type of school and class	Diverse and various environments
Programmed and structured	Occasional and unpredictable
Compulsory	Free
Progressive	Non linear
Based in verbalization and acquisition of a vocabulary	Based on experiences, hands-on, laboratories
Few unexpected results	Many unexpected results
Social aspects not crucial	Social aspects crucial
Time not chosen by the learners	Time chosen by the learners
Evaluated and certified	Not evaluated nor certified

OPEN SCHOOLING

Children's Universities

THE EUCU.NET CHARTER

A Children's University means

- Encouraging children to be curious and to think critically – the mainsprings of research and science
- Communicating to them the idea of universities and providing insights into academic culture as well as their role in the society at large
- Working with young people in such a way as to help universities to be more responsive and open
- Making encounters between children and "the university" (as a community of academic staff and students) possible
- Enthralling them with diverse scientific fields (from humanities, to social sciences and natural sciences) and with diverse scientific methods unbiased by commercial interest
- Giving young people an understanding of their future educational choice and options

A Children's University is based on the aims of

- Providing access for all children without boundaries and on a voluntary basis
- Involving and providing benefit for children from disadvantaged groups (including barriers caused by social or economic, impairment, language or gender)
- Providing an atmosphere of respect without pressure to perform
- Contributing to the enhancement of universities as concerning organisational, didactical and research development

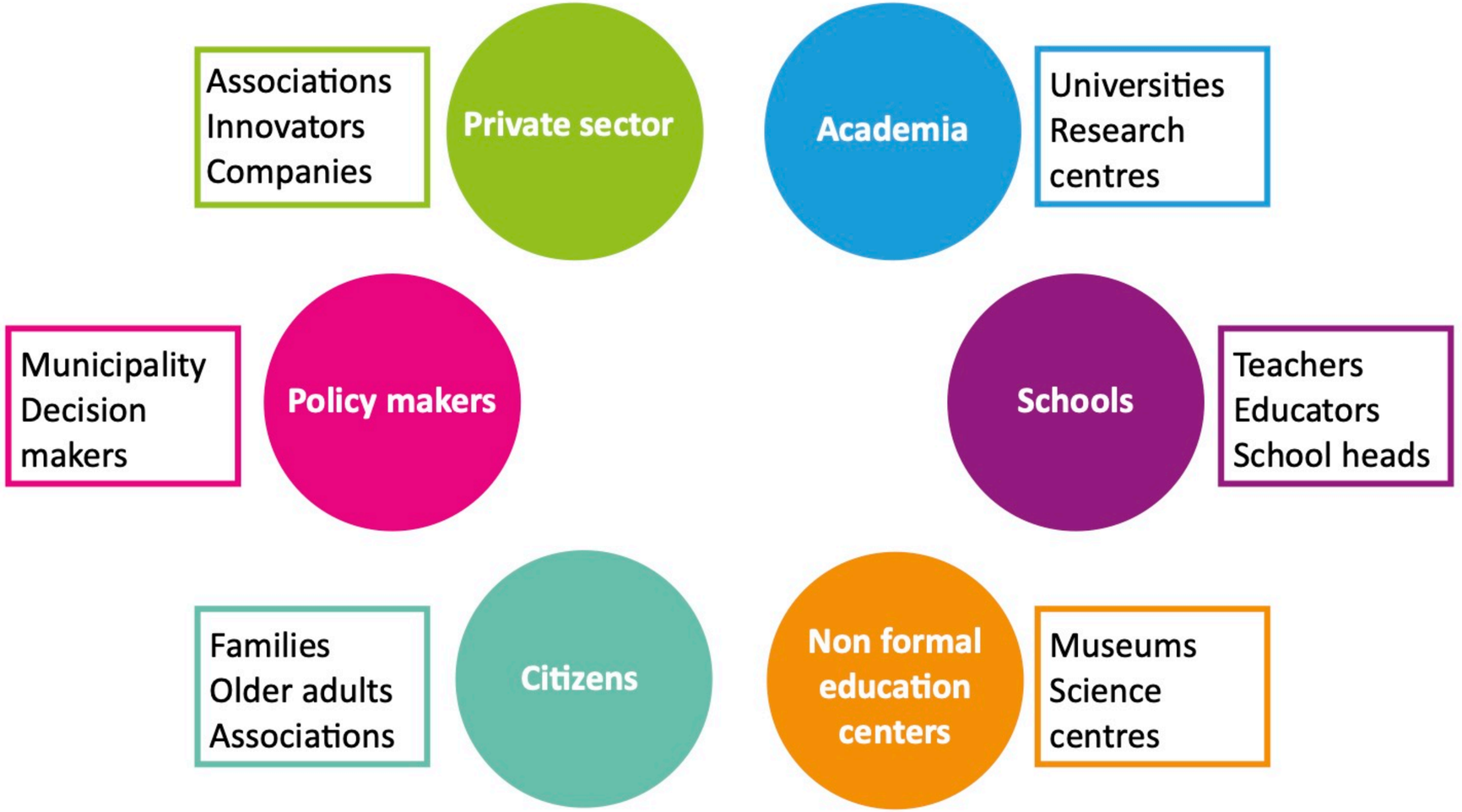
https://www.youtube.com/watch?v=MVchWdJAIAE

PHERECLOS

www.phereclos.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824630.

LOCAL EDUCATIONAL CLUSTER TRIESTE
TRIESTE CITTÀ DELLA CONOSCENZA



Six Local Educational Cluster

Italy

Austria

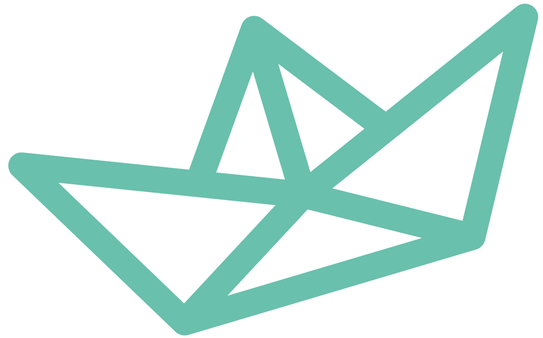
Poland

Finland

Portugal

Colombia

What is Phereclos for us



“Our life boat to bring us to better shores”
“An opportunity to reflect on the post covid schools!
”Networking is now more important than doing activities”
“Le’t work for the for the well-being of the school and the community”
“Let's get out of the logic of disciplines and watertight compartments”

PHERECLOS

LEC Local Educational Cluster

Trieste

Un progetto di PHERECLOS TS

EVENTI

Webinar Sissa MediaLab
Trieste
15 settembre 2021

Workshop «AI at school»
Trieste
30 ottobre 2021

COMMUNITY

Project work: cerco un UI designer!
Udine

Paper di Biotecnologie, vorrei un parere esterno
Trieste

ACADEMY

Comunicare nella scienza
Durata corso: 80 ore
FREE

Master in data analysis
Durata corso: 120 ore