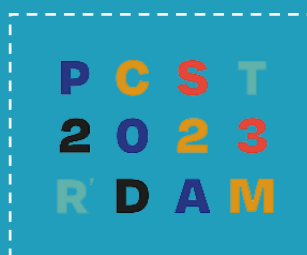


STUDENTS' EMPOWERMENT THROUGH SCICOMM: GOMA - AN EDUCATIONAL ECOSYSTEM FOR ACTIVE CITIZENSHIP

Raquel Branquinho*; Cândida Sarabando; Susana Ambrósio; Cláudia Damião; Joaquim Duarte



BACKGROUND:

According to **UNESCO**:

- ➔ 258.4 million children, adolescents and young adults were not in school.
- ➔ 12 million children of primary-school age has never attended school and will probably never go.

Portugal ranks among the countries with the greatest social inequality in Europe:

- ➔ 21.8% of Portuguese children live in poverty and social exclusion.

Armamar is a rural region in the northern interior of Portugal, south of the Douro Valley.



Area	Population Density	Distance
Armamar	48,5/km ²	1h (67 km)
Viseu	197/km ²	1h30 (131 km)
Oporto	5619/km ²	4h (363 km)
Lisbon	5438/km ²	-

MAIN FINDINGS:



Aligned with **United Nations Sustainable Development Goals**:



2021/2022:

- ➔ n=14 science-based activities
- ➔ **Reaching + 500 students** (from kindergarten to high school)
- ➔ **Involving n=14 schoolteachers**
- ➔ **n=4 scientists**
- ➔ **n=5 local and national partners**



Two-day workshop **"The science of science communication"**

- ➔ Bring communication to students' curriculum.
- ➔ Improve students' skills in the areas of oral, written, and design communication.

WORKSHOP STUDENTS CHARACTERIZATION:

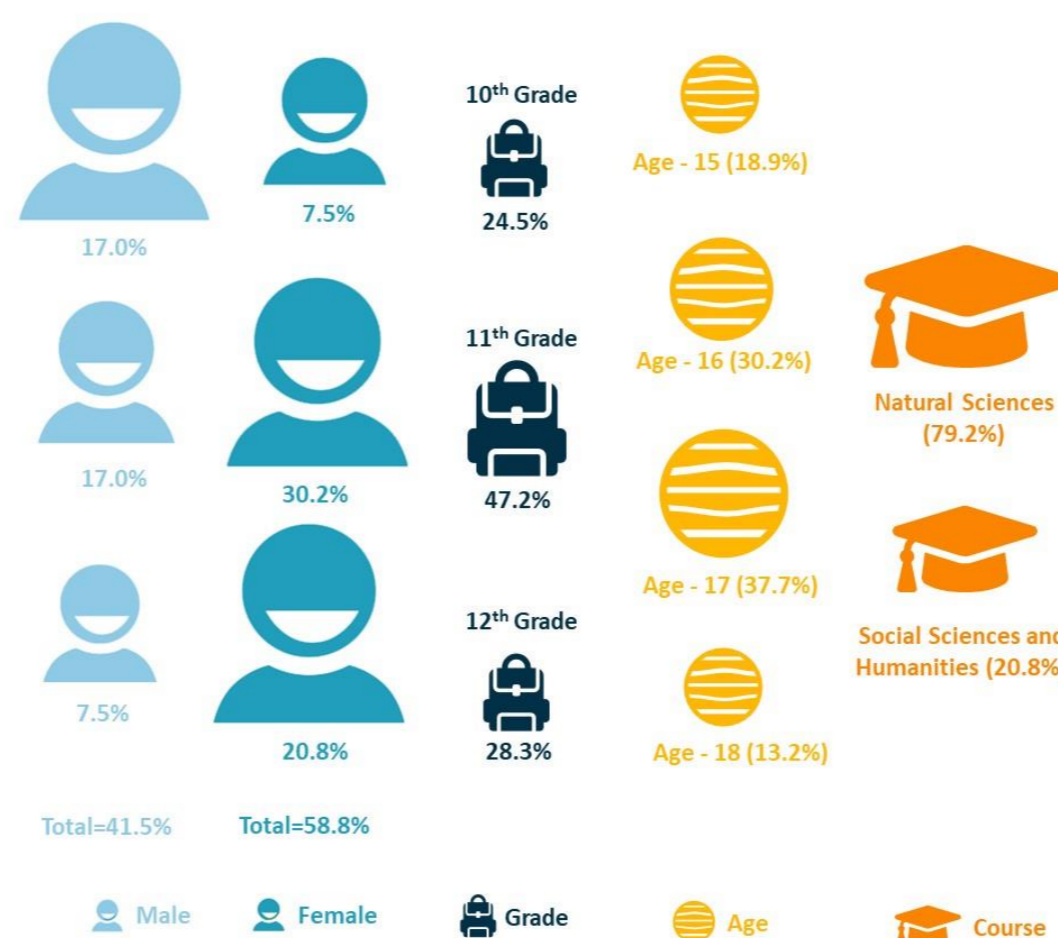


Figure 1. Workshop participants (n=53) characterized by their gender assigned, grade (10th, 11th, and 12th), age and area of study.

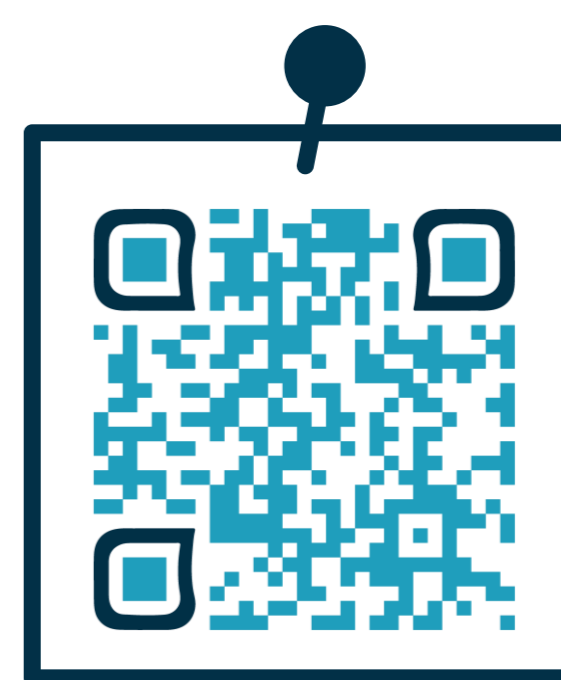
EXAMPLES OF STUDENTS' POSTERS PRESENTATIONS:



COMMUNICATION DEFINITION AS PERCEIVED BY STUDENTS:



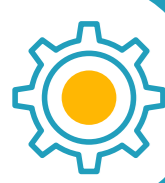
Figure 2. Word cloud representation of the students' definition of communication in one word, at an early stage of the workshop. This is given the frequency of each word was listed. The term "express" was the most repeated (n=9), followed by "transmit" (n=8), "inform" and "speak" (n=5), "understand" (n=4), then other terms.



CHECK OUT OUR VIDEO!



METHODS: Branquinho et al. (2023). doi: 10.21125/inted.2023



THESE DISSONANCES:

Lead to inadequate and unequal access to science learning opportunities.

Emphasised the need for solutions that contribute to the development of skills, allowing students to respond to the complex challenges of the 21st century.



IN RESPONSE
GOMA CREATION (2022)
GOMES TEIXEIRA SCIENCE ACADEMY



TAKE-HOME MESSAGE

GOMA, a project that:

- ➔ promotes science literacy in the rural region of Armamar;
- ➔ deconstructs stereotypes;
- ➔ combats educational disadvantages and inequalities in access to science;
- ➔ acts as a bridge between the public-school community, the academic community and science.



***Raquel Branquinho**

FLUP PORTO Researcher | Science Manager and Science Communicator

GOMA Co-founder | Coordination Team

fraquelb@gmail.com

raquelbranquinho