

Portugal

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Organization and Number of Staff:

University of Coimbra

Funding by:

GLOBE Portugal is currently funded by the Earth Observation Laboratory of the University of Coimbra

Cooperating Organizations/Individuals:

GLOBE Schools (what types, how many):

GLOBE Areas you and schools focus on:

Number of Schools Reporting Data Over Past Year:

Program Implementation, International Cooperation in GLOBE Network, and Activities over Past Year (categorized by GLOBE Strategic Plan 2018-2023 Goals):

1. Education

In 2023, GLOBE Portugal made **significant strides in solidifying its presence and impact throughout the country**. With a dedicated focus on **reaching out to underrepresented communities**, the organization successfully engaged hundreds of students through immersive lectures and hands-on activities conducted in various schools nationwide.

Continuing its commitment to enhancing educational resources in Portuguese, GLOBE Portugal dedicated efforts to review and **develop materials, aiming to bridge gaps in both space and STEM education**. An essential facet of the program involved intertwining scientific knowledge with other disciplines such as arts and humanities, fostering a holistic approach to learning.

The **appointment of Margarida Anastácio as Deputy Director** has notably strengthened the program, contributing decisively to its growth and expanded influence within the country. Notably, the **establishment of the GPM Mentorship Education Track**, co-led by GLOBE Portugal, facilitated successful **connections between scientists from the Goddard Space Flight Center and European educators**. The ongoing second edition of this initiative signifies its success and the program's commitment to further expansion.

Looking ahead, the program plans to integrate this initiative with another significant endeavor, **GLOBE AGRO, spearheaded by GLOBE Portugal**. GLOBE AGRO, kickstarted in the Summer of 2023 at a dedicated workshop, **is tailored to provide specialized training and activities for vocational schools focusing on agriculture and forestry**. This initiative is set to become the cornerstone program of GLOBE Portugal in 2024, showcasing its dedication to practical, customized educational experiences.

The traveling exhibit 'Stories of a Changing World' continued to captivate diverse audiences while generating valuable educational activities as it toured the country. Efforts are underway to expand and enrich these activities, ensuring their continued impact.

Despite facing challenges in training Portuguese-speaking educators due to the structure of traditional GLOBE activities, the program allocated resources to initiate **in-person training sessions conducted by certified GLOBE trainers**. This proactive approach underscores the commitment to overcoming obstacles and enhancing the program's effectiveness in the region.



Figure 1. Students at a GLOBE Portugal lecture in Lisbon.

2. Science

The program in Portugal conducted an **extensive review of available materials in Portuguese**, emphasizing domains requiring scientific support for the creation of new content. To ensure the quality and relevance of these materials, **an advisory board consisting of esteemed scientists and science managers was established**, providing invaluable guidance and setting priority areas.

A significant focus was placed on developing tailored solutions that complement existing materials while addressing specific gaps in earth observation and atmospheric sciences. These efforts have resulted in the **creation of innovative resources that cater to land cover and atmospheric science objectives**, significantly bolstering the program's offerings.

The inaugural year of the program, under new management and a revised strategic plan, predominantly involved exploratory activities in the science domain. Notably, an **upcoming course at the University of Coimbra**, centered on integrating the GLOBE experience into STEM education, has been approved and awaits scheduling, signifying a promising step forward in educational initiatives.

Furthermore, the introduction of atmosphere-related materials and earth observation resources into school curricula has been greatly facilitated by the **GLOBE@Agro initiative**. This collaboration has added significant momentum to the program's efforts, amplifying its impact within educational institutions across the country.

3. Community

The program is currently **focused on school-oriented activities**. Even though we recognize the importance of communities, the second year of the new coordination under the Strategic Plan now in force, did not include an important community outreach component.

The GLOBE AGRO thematic package will support an expansion of community outreach activities. We will also seek collaborations with other GLOBE coordination offices to seek funding to design and implement impactful activities.

4. **Technology**

The program did not focus on technology-related activities in the past year. However, the advanced visualization and data discovery solutions being considered, and described earlier, have strong technological components.

5. **Communications**

The program focused on fostering **B2B meetings to cultivate a robust network of partners** dedicated to supporting the implementation of activities within schools and various organizations.

Additionally, the centerpiece of communication was the **Exhibit 'Stories of a Changing World', accompanied by its virtual counterpart**. Originally attracting hundreds of visitors at its inaugural location, the exhibit debuted in Torres Vedras in 2023, marking the commencement of the initiative's itinerary phase.

The online component comprises a comprehensive story map mirroring the entire exhibit's content, catering to a global audience with materials presented in English. Furthermore, an **upgraded website is slated to launch at watersheds.online, scheduled for Q1 of 2024, offering an enriched experience for users**.

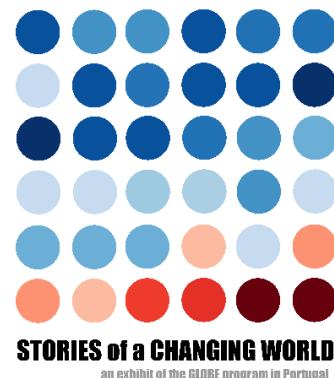


Figure 2 and 3: The exhibit Stories of a Changing World, currently in Torres Vedras.

Plans and Ideas for Next Year:

1. Strengthening Core Leadership:

Expand the leadership team, ensuring diverse representation and expertise within the program's coordination.

2. Expansion and Recruitment:

Focus on recruiting new schools and educators in line with the Strategic Plan objectives, aiming to expand the program's footprint across Portugal, with a focus on the GLOBE AGRO initiative.

3. Thematic Alignment and Trans-Atlantic Relations:

Review thematic areas to align the GLOBE experience in Portugal with the country's educational and scientific priorities, emphasizing the enhancement of trans-Atlantic relations and water equity.

4. Collaboration with Scientists for Resource Development:

Collaborate closely with scientists to develop relevant educational materials, specifically targeting areas such as earth observation, atmospheric science, and land cover studies.

5. Scaling and Completion of Ongoing Activities:

Prioritize scaling and completing existing activities already underway in multiple schools, ensuring their successful implementation and completion. Review progress and apply lessons learned from programs like the GPM Mentorship Education Track.

6. Educator Training and Connection Building:

Intensify efforts to train educators as trainers, empowering them to disseminate GLOBE-related knowledge more effectively. Strengthen ties with other GLOBE countries to foster collaboration and knowledge sharing and secure competitive funding.

7. Emphasis on Diversity, Equity, and Inclusion:

Place a central focus on activities that promote diversity, equity, and inclusiveness within the program, ensuring equal access and participation for all stakeholders.

8. Strategic Plan as the Guiding Document:

Continue utilizing the Strategic Plan as the cornerstone guiding document for the design, implementation, and evaluation of all new initiatives and activities.

This plan leverages the program's strengths, such as its collaboration with scientists, provides a framework for new activities like GLOBE@Agro, and the successful 'Stories of a Changing World' exhibit, while addressing challenges like training Portuguese-speaking educators and enhancing materials for STEM education. It aims to expand the program's impact, foster inclusivity, and align with national priorities, ultimately enhancing GLOBE Portugal's influence within the educational landscape.