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Translating science and innovation for a wider audience

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In an era where misinformation can spread like wildfire and the complexities of scientific research often get misunderstood, the task of translating science for a wider audience has never been more critical.

Science communication (SciCom) goes beyond merely encouraging scientists to discuss their work or being seen as a subset of the communications field. While the term "science communication" is often used interchangeably with public awareness of science (PAS), public understanding of science (PUS), and scientific culture (SC), it is important to distinguish SciCom from these closely related but distinct concepts (Burns et al, 2003).

The challenge lies not only in simplifying intricate concepts but also in maintaining the integrity and accuracy of the information. This delicate balance is essential to foster a scientifically literate society capable of making informed decisions.





The importance of accessible science communication

The importance of translating science into accessible language cannot be overstated. Scientific advancements shape our world, influencing policy decisions, healthcare choices, and technological developments. When scientific knowledge is confined within journal articles, deliverables, and policy briefs, its potential to benefit society at large is significantly diminished. We should not keep important knowledge on (digital) “shelves”!

Additionally, translating science for a wider audience can inspire future generations. When young people understand and appreciate scientific concepts, they are more likely to pursue careers in STEM fields (Chen *et al*, 2024). By demystifying science, we not only educate but also cultivate curiosity and innovation in our society. Personally, and in line with this evidence, I make an effort to present new concepts, terms, and experiences to my 5-year-old daughter every day. After all, kids are tomorrow's scientists.

Challenges in simplifying complex concepts

One of the primary challenges in science communication is the inherent complexity of scientific concepts. Researchers spend years studying niche topics, often using specialized jargon that can be difficult for non-experts to understand. Simplifying this information without oversimplifying the science in itself requires a deep understanding of both the subject matter and the audience's background knowledge.



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Effective science communicators must strike a balance between accuracy and accessibility. It must avoid the pitfalls of sensationalism and ensure that the essence of the research is not lost in translation. This involves not only breaking down complex ideas into digestible chunks but also contextualizing them within the everyday experiences of the audience (RCADEMY Word of life, nd).

The SNUG project: a case study in effective science communication

The SNUG project is at the forefront of sustainable construction solutions, exemplifying how scientific advancements can be made accessible to a wider audience. Using circular economy principles and AI, SNUG helps architects and builders choose the best thermal insulation materials for new and existing buildings.

We explain sustainable construction and circular economy ideas in clear, relatable language, implementing, for example, several campaigns with opinion articles, glossary explainers, and case studies. In the future, we aim to employ infographics, diagrams, and videos to engage the audience in a practical way, making the impact of the project's solutions more tangible.

Public engagement is a key component. SNUG aims to organize workshops, webinars, surveys, and community events to educate stakeholders and the public about the benefits of implementing sustainable construction practices. Through these efforts, SNUG promotes environmental stewardship and Zero-Energy Buildings, making advanced scientific concepts understandable and relevant. The three demonstration sites will create a close connection with their respective local stakeholders, and these actions are crucial to maximizing the effectiveness of our initiatives.

The F6S Innovation team, in close cooperation with our partners, is clearly committed to translating science and innovation for a wider audience, aiming to bridge the gap between scientific research and public understanding, and making the SNUG project's advancements accessible and engaging for the greater public.

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With almost 15 years of experience, Diana Guardado is Innovation Ecosystem and Project Manager of European projects at F6S Innovation, and PhD candidate for Governance, Knowledge and Innovation at Coimbra University. During her professional career, she was involved in more than 50 innovation projects, including technology transfer processes, services for applied research, and pilots/tests with real end-users. Over the past few years, she has been making her specialization on sociotechnical systems, with a five-fold helix approach (university-industry-government-civil society and environment), exploring the impact of climate change, adaptation and resilience.

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