NBS EduWORLD

Partner logo

NATURE BASED SOLUTIONS IN EDUCATION

02.07.2024 – Golden Coast Hotel

Marcelo Gerlach

NBS EduWORLD Summer School 2024

Funded by the European Union

NBS EduWORLD is funded by the European Union (Grant Agreement No. 101060525). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

NBS EduWORLD

AGENDA

Agenda	Question	Time
Institutional Practices – Integrating NBS according to needs		First Time Slot (9:30-11:30)
Introduction	What?	15 min
NBS Practices Examples	How?	20 min
Designing the Intervention	What?	45 min
From What is to How to?	How?	40 min
Pause		11.30 – 11.45
Community Connections		Second Time Slot (11:45-13:00)
Social Elements to NBS Design	Who & How?	30 min
Financing Landscape within the EU for NBS Activities	How?	25 min
Steps towards the Future	How?	10 min

Funded by the European Union

NBS EduWORLD

OBJECTIVES FOR TODAY

- To plan NBS intervention activities in the schools, including resources, tools and strategies needed for implementation (What?)
- To define strategies for long-term community engagement (Who?)
- Identify possible paths for implementation (How?).

Funded by the European Union

NBS EduWORLD

1. SKETCHING THE GROUND (15 MINUTES) [WHAT?]

- Sketches of “what is” (10minutes, flipchart, paper, pens, printed photography, individually and plenary)
  - Individually, (1) draw the basic plan of the school, including the surroundings of the school and the most important natural assets of the neighbourhood/city; and (2) sketch the curricula of a common school month and give some details of a school week and a school day.
  - In plenary, we discuss the current state of the physical schools and curricula with some guided questions. Focus on what is, identifying needs, defining issues.
  - What about unused spaces; What about resources (human, natural, economic); What about water, soil, leftovers, food? What about energy?

Funded by the European Union

2. NBS PRACTICES EXAMPLES

- During this session we will be discussing the results of the designed NBS intervention activities and creating a feasible pathway for implementation.

Funded by
the European Union

NBS EduWORLD

SCHOOL PORJECT BENA NII

Funded by the European Union

NBS EduWORLD

Funded by the European Union

CHALLENGES / NEEDS

- Power Dynamics
- Poor Intercultural Teaching
- Continuity / consistency
- Abiotic and biotic factors
- Lack of Collaboration among Key Actors
- Funding / Investment
- Responsibility over the project activities

Funded by
the European Union

NBS EduWORLD

FROM WHAT IS TO WHAT IF

Funded by the European Union

NBS EduWORLD

Possible Activities without funding

- Compost collection
- Gardening
- Educational Work
- Co-creation Activities

Need Funding

- Rainwater Catcher
- Chicken House
- Community House
- Dining Room
- Trees / Nursery

Funded by the European Union

NBS EduWORLD

FUNDING

SCHMITZ STIFTUNGEN

Funded by the European Union

NBS EduWORLD

PROJECT DEVELOPMENT

Funded by the European Union

NBS EduWORLD

Funded by the European Union

NBS EduWORLD

Funded by the European Union

NBS EduWORLD

COMMUNITY INVOLVEMENT

Funded by the European Union

NBS EduWORLD

Funded by the European Union

NBS EduWORLD

KEY LEARNINGS

- Listen to local actors
- Focus on co-creation processes
- Network and cooperation (Stakeholders) is key
- Find multi-purpose activities
- Diversifying funding
- Working with young people
- Processes Oriented Planning
- Creativity and imagination are key!

Funded by the European Union

NBS EduWORLD

3. DESIGNING THE INTERVENTIONS

Utopian Charge (10 minutes, no materials, in groups of 5)

- During the "Utopian Charge," participants collectively explore utopian potentials through rapid-fire idea generation, aiming to uncover fantastical possibilities. The exercise begins with a prompt asking for the greatest utopian potential of something, followed by spontaneous idea generation. Once all ideas are exhausted, the group concludes the session together. Apply the “Utopian Charge” exercise to the school systems in general.

Funded by the European Union

3. DESIGNING THE INTERVENTIONS

Design and prototyping (30 minutes / flipchart papers, pens, printed photography's, tracing paper / individually)

- If your school were to prioritize climate change adaptation and climate resilience as a significant threat, how would

  (1) the physical infrastructure of the school,

  (2) the curriculum across different school levels, and

  (3) community engagement strategies be transformed?

- What did you add? What did you remove?

Funded by the European Union

NBS EduWORLD

FROM WHAT IS TO HOW TO

Funded by the European Union

1. Observe and Interact:	Explanation:. Before intervening in an environment, understanding its patterns, flows, and dynamics is essential to craft solutions tailored to specific needs.
2. Catch and Store Energy:	Explanation: This principle advocates for the efficient harnessing of resources during periods of peak abundance to ensure a stable supply over time.
3. Obtain a Yield:	Explanation: Focusing on projects that yield meaningful returns ensures that efforts expended translate into tangible benefits.
4. Apply Self-Regulation and Accept Feedback:	Explanation: Design should encourage systems capable of self-regulation and adaptable to feedback for flexible adaptation to variations.
5. Use and Value Renewable Resources and Services:	Explanation: Optimizing the use of renewable resources reduces dependence on non-renewable ones, contributing to long-term sustainability.
6. Produce No Waste:	Explanation: Embrace a mindset of valuing and utilizing all available resources, leaving no room for waste and fostering a commitment to resource efficiency.

Funded by the European Union

NBS EduWORLD

7. Design from Patterns to Details:	Explanation: Begin the design process by observing and understanding the patterns inherent in both nature and society, using these overarching patterns to inform the subsequent addition of intricate details.
8. Integrate Rather Than Segregate:	Explanation: Facilitate the development of relationships between various design elements, creating a cohesive system where components work harmoniously to support each other.
9. Use Small and Slow Solutions	Explanation: Favor the implementation of small, gradual systems that are easier to maintain, capitalize on local resources more effectively, and yield more sustainable outcomes in the long run.
10. Use and Value Diversity:	Explanation: Harness the power of diversity to reduce system-level vulnerability to threats, fully capitalizing on the richness and resilience inherent in diverse ecosystems.
11. Use Edges and Value the Marginal:	Explanation: Recognize the inherent value in the borders and edges of systems, where unique and productive interactions often occur.
12. Creatively Use and Respond to Change:	Explanation: Embrace change as an inevitable force and proactively respond to it through careful observation. Intervene thoughtfully and timely to positively influence and adapt to the evolving dynamics of a system.

Funded by the European Union

5. SOCIAL ELEMENTS TO NBS DESIGN (30 MINUTES) [WHO? & HOW?]

Stakeholder Analysis (15 minutes, no materials, plenary session)

- Stakeholder Mapping Activity: each participant gets to work on a given template to make a stakeholder mapping related to community engagement and NBS implementation at work (15 minutes)

Community Engagement

- Select the most relevant actors, and find windows of opportunity for collaboration, with a special focus on the community.
- What about needs of the community? What about needs of other NGOs? What about needs of local governments?

Funded by the European Union

5. SOCIAL ELEMENTS TO NBS DESIGN (30 MINUTES) [WHO? & HOW?]

Stakeholder Analysis (15 minutes, no materials, plenary session)

- Stage 1: Identify all potential stakeholders and stakeholder groups.
- Stage 2: Assess and prioritise the stakeholders.
- Stage 3: Develop an understanding of your stakeholders.

Funded by the European Union

STAGE 1: IDENTIFY ALL POTENTIAL STAKEHOLDERS AND STAKEHOLDER GROUPS.

This template has been designed to be used for stakeholder identification, categorisation, noting the reasons for engagement and identifying potential stakeholder benefits realised from engaging. An example of how to complete this matrix can be found in Table 3.1 in Section 3 of the *BiodivERsA Stakeholder Engagement Handbook*.

Stakeholder	Category (e.g. NGO, general public, government department)	Reasons to involve the stakeholder(s)	Why the stakeholder may want to be involved (benefits)

Funded by the European Union

NBS EduWORLD

- GOVERNMENT DEPARTMENTS, POLITICIANS, POLICY MAKERS AND ADVISERS (LOCAL, NATIONAL, INTERNATIONAL); OTHER NATIONAL OR INTERNATIONAL POLICY MAKERS OR POLICY GROUPS (E.G. EUROPEAN INSTITUTIONS, ENVIRONMENT AGENCIES)
- NON-GOVERNMENTAL ORGANISATIONS (NGOS)
- BUSINESS AND INDUSTRY
- LOCAL COMMUNITIES
- LANDOWNERS AND MANAGERS
- PROFESSIONAL GROUPS (E.G.VETS, SURVEYORS ETC.)
- SCIENTISTS AND RESEARCHERS WORKING IN RELEVANT DISCIPLINES; SCIENTISTS AND RESEARCHERS WORKING ACROSS DIFFERENT DISCIPLINES
- EDUCATORS
- STUDENTS
- THE MEDIA
- THE GENERAL PUBLIC

S1: EXAMPLE CATEGORIES INCLUDE:

S1: IMPORTANT POINTS TO CONSIDER WHEN IDENTIFYING STAKEHOLDERS:

Who is responsible for making decisions that might affect the project?
Are there policies emerging or in existence that will benefit from or be affected by the Project?
If so who needs to be informed?
Which individuals are likely to be affected by the outputs of the project?
Who, although not directly affected, may be interested in the results of the project?

Are there stakeholders that have been involved in similar projects on previous occasions (some of these may have been identified in Stage 1)?

Which groups or individuals may be able to provide relevant information, equipment or resources?
Who is likely to have a negative view of the research?
Which stakeholders is it essential to involve?
Who is it preferable to involve?
Who needs to be consulted?
Who needs to be informed?
Which parties are likely to be the most influential?

Who will be critical to the final delivery?

Funded by the European Union

S2: ASSES, ANALYSE AND PRIORITISE STAKEHOLDERS

This template is an example of a stakeholder interest-influence matrix. The user may consider inserting additional columns to capture more detail about each stakeholder than is typically possible using graphical techniques.

Name of Organisation	What aspects of the project are they likely to be interested in?	Key messages from your project for this group	Why is Engagement with this Stakeholder Important	How can collaboration with these stakeholders benefit the innovation process?

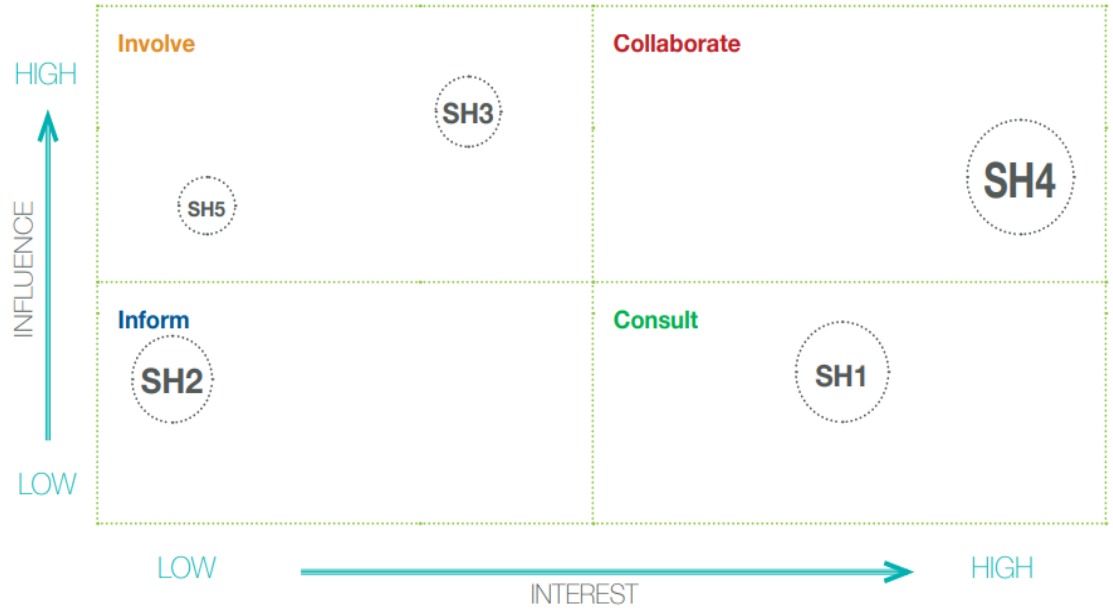
Funded by the European Union

NBS EduWORLD

S2: ASSES, ANALYSE AND PRIORITISE STAKEHOLDERS

Involve Keep these stakeholders adequately informed and maintain regular contact to ensure no major issues are arising.		**Collaborate** These stakeholders are essential to the project and must be fully engaged with. Enlist their full help, create partnerships, galvanize support of the project, and make the greatest effort to keep them satisfied.
Inform Monitor these stakeholders and keep them adequately updated as and when required, tailoring communications to meet stakeholder needs.		**Consult** Provide these stakeholders with enough information and interaction to keep them updated and to address their concerns, but do not overwhelm them with too much information.

HIGH
INFLUENCE
LOW
LOW
INTEREST
HIGH



Funded by the European Union

S3: UNDERSTAND YOUR STAKEHOLDERS

This template has been designed to help understanding existing relationships between stakeholders, their knowledge and views of a project and their willingness and capacity to engage.

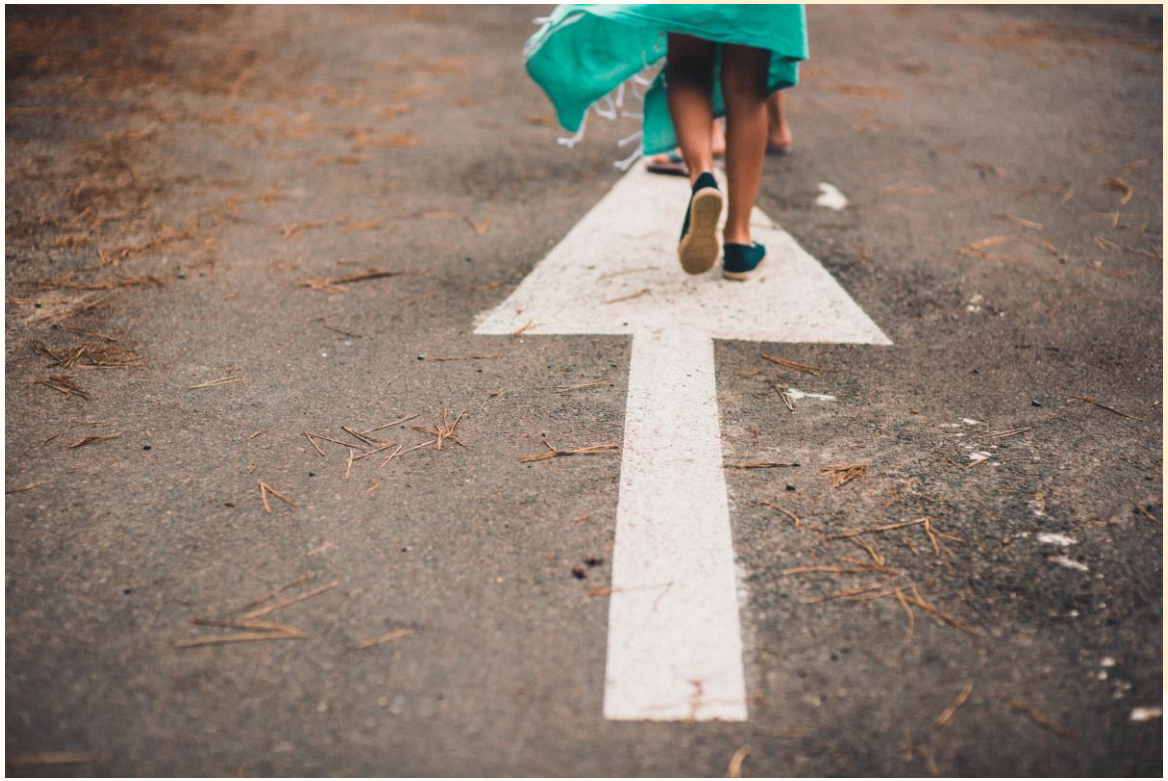
	Stakeholder	Existing relationship	Relationship with other stakeholders	Knowledge of the project	Views on the project	Best means of communication	Willingness to engage	Capacity to engage
Collaborate								
Involve								
Consult								
Inform								

Funded by the European Union

6. FINANCING LANDSCAPE WITHIN THE EU FOR NBS ACTIVITIES

Funded by
the European Union

7. STEPS TOWARDS THE FUTURE



Funded by
the European Union