

NBS EduWORLD - Project Education Learning Unit Template

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Learning Unit (LU) Planning Template - High Level Overview

Name of Learning Unit (LU) Topic		UrbanByNature: Going through Step 3 and 4 PRIORITISE, COMMIT AND PLAN					
NBS Context (e.g. urban rural, coastal)	NBS keywords complete checklist at the end of the document	Other Keywords (topics other than NBS) add in Other below	Linked or complementary concepts to NBS (to assist curriculum integration)	Prior learner knowledge of NBS (high, moderate, low/none)	Prior instructor knowledge/ skills/ competences of NBS or equivalent	Key EU NBS resources used (for instructor preparation) include link	Type of LU - lecture, workshop, field trip/site visit, case study
any			Biodiversity, ecosystem based adaptation	low	low		Lecture
Target academic subject / discipline / professional area or group	Target learners/ groups [age range of learners] if applicable	Min/ Max # of learners (if applicable)	Sector (e.g, professional, higher education, community)	Prerequisites required of learners if applicable (education)	EQF (European Qualifications Framework) level (or Irish NFQ) indicative only	Time for LU (aim is 50 minutes per learning unit)	Course delivery format (e.g. in- person, hybrid, online)
	undergraduate higher education, also practitioners and local	20	Professional and higher education and local governments	Prior basic knowledge of NbS and some understanding of integrated		50	In-person / On- site
Overall Purpose	Understand the importance of prioritisation in planning and committing to a specific NbS.						
LU Summary (2-3 sentences)	An introduction to prioritise, plan and commit steps of the UbN capacity building programme. The focus of this learning unit is to make the target audience to actively think about the co-creation aspects relevant for NbS and give an overview of challenges associated with getting commitment from stakeholders for NbS implementation and how to tackle them.						
Learning Outcome 1	Understand the importance of prioritisation, commitments and planning for NbS in a city using co-creation						
Learning Outcome 2	Learn about effective steps to plan an NbS – in brief						

Learning Outcome 3	Learn about the challenges when it comes to committing and planning NbS
Learning Outcome 4	Explore the various barriers and bottlenecks when it comes to prioritisation

LU designer resources for writing learning outcomes (click Learning Outcomes - Using Taxonomies tab or pyramid [here](#))

Activities and Elements of Learning

Aim that each learning unit include at least 4 activities for an interactive learning experience

Time (duration of activity, typically 50mins)	Aims - linked to NBS concepts or topics)	Link to Learning Outcome	Learning Activity [PPT Slide # - if applicable]	Teacher action/ activity (Learner action/activity)	Confirmation of learner's learning (assessment of learning)	Link to online NBS resources	Offline resources and materials (e.g. post-its,)
00:00 (10 min)	To gauge the level of understanding of the importance of prioritisation for commitment and planning of NbS	1,2	Ask: What should your city do to prioritise, commit and plan for NbS (Slide 3 followed by Q and A and then Slide 4)	Ask question 1: What do you think your city should do to prioritise for NbS? (learners respond) Ask Question 2: How can the city make sure the	Learners respond to question by raising hands, others who agree do a hand gesture to indicate that with a thumbs up, and thumbs down to not agree. Point to the person speaking if there is a follow up response or remark.	N/A	Flipchart to gather responses - facilitated by a learner with trainers guidance
00:10:00 (10 min)	To ensure the aspects of co-creation in prioritisation of NbS are considered and understood. As well as the principles and criteria are clear.	1, 2,3	Watch a video together on co-creation, why and how. Follow this up by a slide on what are NbS and what are not. As well as learn about the principles and criteria for co-creation(Slides5,6,7)	Present the slides, show the video, explain the need to safeguard the meaning of NbS and share what is and what isnt NbS followed by some more reflections on co-creation principles and criteria.	Learners listen, watch and learn about NbS and the importance of co-creation. Can ask clarifying questions.		

00:20:00 (15 min)	To understand the steps towards co-creation	1	Silently thinking of the additional steps of co-creation that might be missing from the video shown.	Ask question: Think of any other steps that might have not been included in the 5 steps mentioned in the video, while they may be important for co-creation? Write them on a post it and in 5 mins come to the front and put it on the flipchart.	Learners think back to the video and the steps of co-creation presented there and try to find any missing aspects or those that complement any steps already mentioned. Then they present their thoughts in front of all while the teacher moderates the sharing of ideas.		
00:35 (5min)	To support the learners to think of prioritisation in a holistic sense as well as with an example make it more concrete. To also discuss the bottlenecks and challenges as well as solutions.	3, 4	Using slides 9,10,11 and 12 explanation on Prioritisation, commitment efforts and challenges as well as planning effectively for NbS.	Trainer presents the slides and uses the help of reading resources, explains the process of prioritisation, challenges in getting commitment and key elements to plan effectively and overcome barriers.	Learners get a grasp on the concepts presented from the slides and make a clear and comprehensive picture for themselves on how NbS should or could be prioritised, committed to and planned for implementation as the next step.		

00:40 (5 min)	To discuss and understand the role of co-creation in the processes defined as well as seeing the challenges that can be met with when proceeding towards NbS implementation without well thought through priorities, plan and commitment.	3, 4	Ask questions and let learners respond accordingly.	Ask: What role does Co-creation play in Prioritise, Commit and Plan and Why? Follow up with another question: Why is there a need to overcome the bottlenecks to prioritisation before moving on to commit and Plan?	Learners understand the role co-creation plays after having gone through the lecture as well as have a clear idea on possible bottlenecks and challenges for NbS implementation if the previous steps (Prioritise, commit and plan) are not conducted in a coherent manner.		
00:45 (5min) 50 minutes total	Reflections and feedback to the session	1,2,3,4	Ask questions and let learners respond accordingly.	Ask: What is needed for a solid commitment and what could hinder the process? If you were to take home one key message, what would that be?	Learners try and think of ways in which commitment could be encouraged by relevant authorities and stakeholders for NbS implementation and understand how if there was no formal commitment, the process might fail to deliver. They also share their key messages.		

NBS- Application of Curriculum, Trends and Skills

Curriculum integration (how it may connect to curriculum)	
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<p><u>Teaching & Learning Trends employed</u></p> <p>Highlight all that apply</p> <p>(Source)</p>	<p>Project-based learning: e.g., students work in groups on a research project on greenhouses and the greenhouse effect, alternatives to waste management or investigate what are the views of their peers on climate change.</p>	<p>Peer learning: e.g., students work in groups, evaluate the work of their peers, or develop assessment questions to assess peers.</p>	<p>Problem-based Learning: e.g., students are introduced to a problem and challenged to find a solution together based on the information provided to them.</p>	<p>Student-centred learning: the learning scenarios are not based on classical instruction by the teacher, but they are expected to actively engage students in the lessons.</p>	
<p>21st Century Skills</p> <p>Highlight all that apply</p> <p>(Source)*</p>	<p>Creativity: e.g., students think of various solutions for promoting a better lifestyle in their communities or encourage greener solutions to their schools' issues.</p>	<p>Information/ Media literacy: students explore examples of NBS, research similar solutions in other communities.</p>	<p>Collaboration: e.g., students work in groups and engage in task division to produce outputs.</p>	<p>Critical thinking: e.g., students learn that a debate on deforestation or climate change does not consist of two opposing camps only but involves many stakeholders with different perspectives.</p>	<p>Communication: e.g., students present their work to the whole class and learn to put forth strong arguments based on facts.</p>

*Gras-Velázquez, À., Mulvik, I. B., Campodonio, A., Nada, C. & Pocze, B. (2020) *Nature-Based Solutions in education - Validation report, European Commission, August 2020* [accessed on 25/03/2024 <https://files.eun.org/NBS/NBS-pilot-validation-report-final.pdf>] p.8.

<p>GreenComp - European Sustainability Competency Framework <u>Highlight all that apply</u></p> <p>(Source) 1- Embodying Sustainability Values and 2 - Embracing Complexity in Sustainability (see pp.13-14)</p>	<p>1.1 Valuing Sustainability: To reflect on personal values; identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values</p>	<p>1.2 Support Fairness: To support equity and justice for current and future generations and learn from previous generations for sustainability</p>	<p>1.3 Promoting Nature: To acknowledge that humans are part of nature; and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems</p>	<p>2.1 Systems Thinking: To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems.</p>	<p>2.2 Critical Thinking: To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.</p>	<p>2.3 Problem Solving: To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems</p>
<p>GreenComp - European Sustainability Competency Framework <u>Highlight all that apply</u></p> <p>(Source) 3- Envisioning sustainable futures and 4 - Acting for Sustainability (see pp.13-14)</p>	<p>3.1 Futures Literacy: To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future.</p>	<p>3.2 Adaptability: To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk. generations and learn from previous generations for sustainability</p>	<p>3.3 Exploratory Thinking: To adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods.</p>	<p>4.1 Political Agency: To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.</p>	<p>4.2 Collective Action: To act for change in collaboration with others.</p>	<p>4.3 Individual Initiative: To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet</p>

	Nature-based entrepreneurship	
	NBS and new business and investment models	
x	Citizen participation, stakeholder/community consultation	
	Disaster risk reduction	
	Risk management and resilience	
x	NBS policy development and implementation	
	NBS research	
	Green infrastructure	
	Green finance / sustainable finance	
	Ecosystem services and ecosystem-based approaches	
	Rural municipal/local authority/government planning	
	Coastal municipal/local authority/government planning	
	Urban municipal/local authority/government planning	
	Improving well-being and quality of life	
	NBS and new business and investment models	
	NBS and CCAM (Connected, Cooperative and Automated Mobility)	
	Other 1: (Please specify)	Commitment for NbS
	Other 2: (Please specify)	Prioritisation or selection of NbS
	Other 3: (Please specify)	

Keywords Source 1: United Nations Environment Programme (2020). *The Economics of Nature-based Solutions: Current Status and Future Priorities*. United Nations Environment Programme Nairobi., p.5. (keywords above in italics)

Keywords Source 2: Faivre N, Fritz M, Freitas T, de Boissezon B, Vandewoestijne S. (2017)'Nature-Based Solutions in the EU: Innovating with nature to address social, economic and environmental challenges.' *Environ Res.* 2017 Nov;159:509-518. doi: 10.1016/j.envres.2017.08.032. Epub 2017 Sep 8. PMID: 28886502.

Keywords Source 3: European Commission (2015). *Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities: Final Report of the Horizon 2020 Expert Group on 'Nature-Based Solutions and Re-Naturing Cities' Full Version*. Luxembourg: Publications Office.