

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 6 MONITOR, Collective workshop					
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	see list at the end of the document	see list at the end of the document	/	none	none	https://op.europa.eu/en/publication-detail/-/publication/d7d496b5-ad4e-11eb-9767-01aa75ed71a1 https://connectingnature.eu/sites/default/files/downloads/connecting-nature-reflexive-monitoring-guidebook.pdf	Workshop
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)
Local governments, municipality	any	/	professional	none	Not sure/not applicable	50 min	In-person / On-site
Overall Purpose	Overall purpose of this LU is to become familiar with step 6 of the UrbanByNature framework "Monitor".						

50 min	Participants work collaboratively and in a holistic way. They first go through 15 min of contextual information, before jumping to a workshop exercise. In this activity, they go through 3 steps and their related guiding questions in order to develop their own citizen science monitoring protocol.	Through the 15 min of presentation, participants will understand the importance of monitoring and the diverse co-benefits related to the involvement of citizens in the monitoring process. Eventually, they also reflect and learn about the major steps to build a protocol for monitoring.	Slides 1-12 are dedicated to the presentation of contextual information. Slides 13-18 are focusing on the workshop activity.	Present the contextual information and answer potential questions. Guide, moderate and keep time during the discussions of the workshop activity.	The workshop activity could also be done in a written way, asking every participant to hand it over to the teacher at the end of the 35 minutes dedicated to the activity.	https://op.europa.eu/en/publication-detail/-/publication/d7d496b5-ad4e-11eb-9767-01aa75ed71a1 https://connectingnature.eu/sites/default/files/downloads/connecting-nature-reflexive-monitoring-guidebook.pdf	post-its, white boards, paper, pens, creativity!

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><u>Highlight all that apply</u></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><u>Highlight all that apply</u></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	
	NBS policy development and implementation	
x	NBS research	
x	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	
x	Improving well-being and quality of life	
	NBS and new business and investment models	
	NBS and CCAM (Connected, Cooperative and Automated Mobility)	
x	Other 1: (Please specify)	NBS monitoring
	Other 2: (Please specify)	
	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.

some case studies from the MNHN in France about citizen science, to understand how citizen science can support NbS mainstreaming. Eventually, the last 35 minutes are d

educated to a collective workshop activity, gathering different departments from a municipality in order to develop their own citizen science monitoring protocol.