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	33. NBS community project management						
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
				moderate	Moderate	https://unalab.eu/system/files/2020-02/d62-municipal-governance-guidelines-2020-02-17.pdf chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.regreen-project.eu/wp-content/uploads/Brief_7-Barriers-and-enablers-in-NbS-governance.pdf https://unalab.eu/system/files/2020-02/d31-nbs-performance-and-impact-monitoring-report2020-02-17.pdf	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)

Municipality workers, NGOs	Municipality workers, NGOs	NA	professional		EQF 6 - Irish NFQ 7/8 Ordinary/H	50 minutes / or more	Hybrid
Overall Purpose	The purpose of this Learning Unit is to equip municipality workers and other professionals with tools and knowledge how to manage NBS projects - how to develop project intervention logic, engage stakeholders, ensure project sustainability, and measure impact.						
LU Summary (2-3 sentences)	This Learning Unit introduces the essential action areas for effectively managing NBS community projects: how to develop project intervention logic, engage stakeholders, ensure project sustainability, and measure impact. Interactive activities allow learners to practive the application of these actions on hypothetical scenarios of NBS projects.						
Learning Outcome 1	Develop project intervention logic						
Learning Outcome 2	Identify strategies to engage stakeholders in an NBS project						
Learning Outcome 3	Employ adaptive thinking and problem-solving skills in managing NBS projects						
Learning Outcome 4	Select how to monitor the success of an NBS community project						

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 (5 min)	Introduction. What is NBS community project management? Reason for it and key action areas.		2 to 4				
00:05 (15 min)	What is a project intervention logic and how to develop it.	1	5 to 7	Facilitated Class Brainstorm	Participants discuss aloud to collectively finish the task	Included in PPT notes	

00:20 (8 min)	What is stakeholder engagement and co-creation in the project planning phase. What activities can be used to engage stakeholders?	2	8 to 10	Open question to all learners or asked on the online platform Menti to create wordcloud	Answers provided aloud / seen on shared screen	Included in PPT notes	
00:28 (12 min)	What do Sustainable Management Strategies entail? What enables NBS project management? How to employ adaptive management?	3	11 to 14	Group work - two groups (or more) practice adaptive thinking in and NBS management scenario	Discussion in groups and presentation by group representatives to the rest of the learners	Included in PPT notes	
00:40 (10 min)	How to monitor an NBS project?	4	15 to 16	Individual work - writing three possible answers to the task question	Everyone shares / could be posted online. Educator can highlight best examples or discuss weaker answers (answers can be submitted anonymously through an online platform) .	Included in PPT notes	

NBS- Application of Curriculum, Trends and Skills

Curriculum integration (how it may connect to curriculum)	

Teaching & Learning Trends employed **Highlight all that apply** (Source)	**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.	**Peer learning:** e.g., students work in groups, evaluate the work of their peers, or develop assessment questions to assess peers.	**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.	**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.
21st Century Skills **Highlight all that apply** (Source)*	**Creativity:** e.g., students think of various solutions for promoting a better lifestyle in their communities or encourage greener solutions to their schools' issues.	**Information/ Media literacy:** students explore examples of NBS, research similar solutions in other communities.	**Collaboration:** e.g., students work in groups and engage in task division to produce outputs.	**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.	**Communication:** e.g., students present their work to the whole class and learn to put forth strong arguments based on facts.

*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.

GreenComp - European Sustainability Competency Framework **Highlight all that apply** (Source) 1- Embodying Sustainability Values and 2 - Embracing Complexity in Sustainability (see pp.13-14)	**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	**1.2 Support Fairness:** To support equity and justice for current and future generations and learn from previous generations for sustainability	**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	**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.	**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.	**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
GreenComp - European Sustainability Competency Framework **Highlight all that apply** (Source) 3- Envisioning sustainable futures and 4 - Acting for Sustainabilty (see pp.13-14)	**3.1 Futures Literacy:** To envision alternative sustainable futures by im agining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future.	**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	**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.	**4.1 Political Agency:** To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.	**4.2 Collective Action:** To act for change in collaboration with others.	**4.3 Individual Initiative:** To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet

Author and organisation to credit when using the LU	

NBS Keywords Checklist (tick here below)

References for learners (can be used for syllabus or further reading post-LU

	NBS Keyword		Resource Citation	Link
	Forest Preservation		Resource Citation	Link
	Forest Restoration		T. Hawxwell, S. Mok,	https://unalab.eu/system/files/2
	Forest enhanced management for woodfuel harvest		UNaLab (2019), "D.3.	https://unalab.eu/system/files/2
	Forest Production			
	Grassland Preservation			
	Grassland Restoration			
	Grassland grazing management			
	Coastal Preservation			
	Coastal Restoration			
	Coastal maintenance of slope vegetation			
	Maintenance of coastal, floodplain and riverine vegetation			
	Agroforestry			
	Reduce tillage and carbon restoration practices			
	Agricultural intensificiation			
	Urban forests and green spaces			
	Urban green roofs			
	Climate-change adaptation and mitigation			
	Sustainable cities/ sustainable communities			
	Re-naturing cities/ re-naturing communities			
	Urban regeneration			
	Coastal resilience			
	Multi-functional watershed management			
	Enhancing the insurance value of ecosystems			
	Sustainability of the use of matter and energy			
	Sustainable development			
	Innovating with nature			
	Biodiversity			
	Nature-based enterprises			

	Nature-based enterpreneurship	
	NBS and new business and investment models	
✓	Citizen participation, stakeholder/community consultation	
	Disaster risk reduction	
✓	Risk management and resilience	
	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)	Project Management
	Other 2: (Please specify)	Project intervention logic
	Other 3: (Please specify)	Monitoring

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.*

020-02/d31-nbs-performance-and-impact-monitoring-report2020-02-17.pdf