

NBS EduWORLD - Project Education Learning Unit Template

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Learning Unit (LU) Planning Template - High Level Overview

Name of Learning Unit (LU)		UrbanByNature: Going through Step 5 IMPLEMENT					
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	municipal/local authority/govern ment planning; improving well-	co-creation; mutli- stakeholder engagement; implementatio	Multi-Level Stakeholder, Co- Participatory Processes	none	none	https://networknature .eu/empowering- youth-climate-action- insights-and- strategies- aalborg2024	
Target academic subject / discipline / professional area or group	0 1	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)
any	15 - 25	minimum of 10	high school, higher education.	none		50 minutes	In-person / On- site

Overall	The overall purpose of this Learning Unit is to faciliate the expoloration and understanding of various stakeholder perspectives for
	Nature-based Solutions implementation.
LU Summary (2-3 sentences)	In this Learning Unit, you will enter the role of a stakeholder at the fictional Evergreen School. Located in a city with 200,000 residents, Evergreen is facing sustainability challenges after a city council report reveals its poor sustainability performance in areas such as emissions, energy inefficiency, and biodiversity decline. A student-led survey further highlights issues of food waste and a lack of green spaces to address these challenges. The school principal, Mx. Green, initiates a mission to transform Evergreen School into a model of sustainability you will collaborate and co-develop knowledge regarding key elements in the nature-based solutions implementation process.
Learning Outcome 1	Understand the perspectives and priorities of diverse stakeholders involved in implementing a nature-based solution.
	Through a youth empowerment role-playing game, understand the process of NbS implementation by:
	- Exploring the complexities of urban sustainability challenges
	- Developing collaborative solutions and concrete action plans
Learning Outcome 2	- Promoting youth empowerment and meaningful participation in sustainability initiatives
Learning Outcome 3	
Learning Outcome 4	

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

							Offline
							resources
Time (duration	Aims - linked		Learning	Teacher action/			and
of activity,	to NBS	Link to	Activity	activity	Confirmation of learner's		materials
typically	concepts or	Learning	[PPT Slide # -	(Learner	learning (assessment of	Link to online NBS	(e.g. post-
50mins)	topics)	Outcome	if applicable]	action/activity)	learning)	resources	its,)

	Faciliate the	Learning		Explain the role	The reflection could also be	https://docs.google.c	
Each participant	•	Outcome 1		playing game	presented as an essay	om/document/d/1JX	
picks a	and	Understand	groups (pp 9),	and why it's	requirement for deeper reflection.	-	description
character sheet	understanding	the	each group	important to		ERDXN7-	3x scenario
randomly and	of various	perspectives	focused on one	understand		G0D20TPptqiJCR-	(on a flipchart)
discovers their	stakeholder	and priorities	sustainability	diverse		Ow/edit?tab=t.0#hea	3x mediator
role. (2')	perspectives	of diverse	goal (1: Energy	stakeholder		ding=h.fw9zb1mcrue	sheet
Give them time	required for	stakeholders	use	perspectives for		<u>X</u>	3x action plan
to sit together	effective	involved in	2: Food quality	NbS			template (on a
and briefly	Nature-based	implementing	and waste	implementation.			flipchart)
discuss their	Solutions	a nature-	3: Biodiversity).	Break the			Marker, pens,
understanding	implementation.	based	Each focus	learners into			Tape
of the role with		solution.	group has at	groups and hand			
those who play			least four	out character			
the same one.			different	sheets; prompt			
(5´)			participants with	groups with			
Facilitate the			different roles	discussion			
discussion, as			(moderator,	starters;			
detailed in your			student,	summarise the			
character sheet.			member of the	exercise and			
Make sure that			school	faciliate the			
one			management	group discussion			
sustainability			team, city	reflection.			
action is			council or board				
identified after			of education				
10-15', so the			member)				
participants can							
focus on the							
youth							
engagement							
part. (25')							
Ask the							
participants to							

NBS- Application of Curriculum, Trends and Skills

Curriculum
integration (how
it may connect
to curriculum)

	Duningt based				
	Project-based				
	learning: e.g.,				
	students work				
	in groups on a				
	research			Student-	
	project on		Problem-based	centred	
	greenhouses	Peer	Learning : e.g.,	learning: the	
	and the	learning: e.g.,	students are	learning	
Teaching &	greenhouse	students work	introduced to a	scenarios are not	
<u>Learning</u>	effect,	in groups,	problem and	based on	
<u>Trends</u>	alternatives to	evaluate the	challenged to	classical	
employed	waste	work of their	find a solution	instruction by the	
	management or	peers, or	together based	teacher, but they	
Highlight all	investigate what		on the	are expected to	
that apply	are the views of		information	actively engage	
	their peers on	questions to	provided to	students in the	
(Source)	climate change.		them.	lessons.	
100000					
	Creativity: e.g.,			Critical	
	students think			thinking: e.g.,	
	of various	Information/		students learn	
	solutions for	Media		that a debate on	
	promoting a	literacy:		deforestation or	
21st Century	better lifestyle	students	Collaboration:	climate change	
Skills	in their	explore	e.g., students	does not consist	
JKIII3	communities or	examples of	work in groups	of two opposing	
Highlight all		The second secon	0 .		
	encourage	NBS, research similar	task division to	camps only but	Communications of students
that apply	greener solutions to	similar solutions in		involves many	Communication: e.g., students
			produce		present their work to the whole
(0) *	their schools'	other	outputs.	different	class and learn to put forth strong
(Source)*	issues.	communities.		perspectives.	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.

						2.3 Problem
						Solving: To
			1.3 Promoting			formulate current or
GreenComp -			Nature: To			potential challenges
European	1.1 Valuing		acknowledge	2.1 Systems		as a
Sustainability	Sustainability:		that humans are			sustainability
Competency	To reflect on		part of nature;	approach a		problem in terms of
Framework	personal	1.2 Support	and	sustainability		difficulty, people
Highlight all	values; identify	Fairness: To	to respect the	problem from all		involved, time and
that apply	and explain	support equity	needs and	sides; to		geographical scope,
	how values vary		rights of other	consider time,	2.2 Critical Thinking: To assess	in order to
(Source) 1-		current and	species and	space and	information and arguments,	identify suitable
Embodying	•	future	of nature itself	context in order	identify	approaches to
Sustainability	while	generations	in order to	to understand	assumptions, challenge the	anticipating and
Values and 2 -	critically	and learn from	restore and	how elements	status quo, and reflect	preventing problems,
Embracing		previous	regenerate	interact within	on how personal, social and	and to mitigating and
Complexity in	they align with	generations	healthy and	and	cultural backgrounds	adapting
Sustainability	sustainability	for	resilient	between	influence thinking and	to already existing
(see pp.13-14)	values	sustainability	ecosystems	systems.	conclusions.	problems
GreenComp - European	3.1 Futures Literacy: To envision	Adaptability: To manage transitions and challenges in complex sustainability situations and make	3.3 Exploratory			
Sustainability	alternative	decisions	Thinking: To			
Competency	sustainable	related	adopt a	4.1 Political		
Framework	futures by		relational way of	Agency: To		
Highlight all	0 0	the face of	thinking by	navigate the		
that apply	developing	uncertainty,	exploring	political system,		4.2 Individual
(Source) 2		ambiguity	and linking	identify political		4.3 Individual
(Source) 3-		and risk.	different	responsibility and		Initiative: To identify
Envisioning	, ,	generations	disciplines,	accountability for unsustainable		own potential for
sustainable futures and 4 -	steps needed to achieve a		using creativity			sustainability and to
	preferred	previous	and	behaviour, and	4.2 Collective Action: To act for	actively contribute to
Acting for	sustainable	generations for		policies for		improving prospects for the community
Sustainabilty (see pp.13-14)	future.	sustainability	or methods.	sustainability.	change in collaboration with others.	and the planet
(See pp. 13-14)	luture.	Sustainability	or methods.	sustainability.	otileis.	and the planet

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Author and	
organisation to	
credit when	
using the LU	

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NBS Keywords Checklist (tick

here below)

nere below)	
	Forest Preservation
	Forest Restoration
	Forest enhanced management for woodfuel harvest
	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

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

Resource Citation	Link
- Coount of Ontation	

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)					
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.