

NBS EduWORLD - Project Education Learning Unit Template - DRAFT

Prepared by: Dr. Siobhan McQuaid, Horizon Nua & Trinity Business School - Last revision 8th November 2024

Learning Unit (LU) Planning Template - High Level Overview

Name of Learning Unit (LU) Topic		What is nature-based entrepreneurship?					
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
any			Professional development	low	Low		Lecture
Target academic subject /	Target learners/ groups [age range of	Min/ Max # of learners	Sector (e.g, professional, higher	Prerequisites required of learners if	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-
Business Sustainability	Professional	n/a	Professional	None	EQF 6 - Irish NFQ 7/8 Ordinary/Hd	50 minutes	Online
Purpose	To introduce the concept of nature-based entrepreneurship within the broader context of the economy and society as a whole						
LU Summary (2-3 sentences)	All humans and all businesses need a healthy planet to survive and prosper. However, the steep decline in nature and biodiversity, intertwined with the climate and pollution crisis, are resulting in the increased frequency and severity of natural disasters with devastating impacts for nature and society. This learning unit sets the context for transformative change explaining how transforming businesses and economic systems to work with, and for, nature can help to reverse these negative trends. In this unit, participants will learn about nature-based solutions and nature-based enterprises and various initiatives supporting businesses in this transition. Participants will reflect and analyse the mission of their business (or idea) and consider their alignment with nature-based solutions and nature-based enterprises in the						
Learning Outcome 1	Understand the relationship between business and nature and evaluate risks, dependencies and opportunities.						
Learning Outcome 2	Critique and contextualise new concepts such as the nature positive-economy, nature-based solutions and nature-based enterprise (NbEs).						
Learning Outcome 3	Apply this knowledge to different business contexts, exploring how different business (concepts) aligns with nature-positive principles.						
Learning Outcome 4	Learn about initiatives supporting business transition towards nature-positive and get involved.						

Activities and Elements of Learning

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

Time (duration of activity)	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 (and/or academic resources with DOI as relevant)	Offline resources and materials (e.g. post-its,)
00:10 (10 min)	Understand the relationship between business and	1	#3-4	Present context for LU , key concepts and examples	Followed by activity confirming learner's learning	See resources 1-4 below.	
00:20 (10 minutes)	Identify business risks, dependencies and opportunities related to	1	#5	Activity: Group work with learners to explore business risks, dependencies	#5 Group activity applying learning to concept of learners own business or business idea	See resources 1-4 below.	Break-out room function
00:35 (15 minutes)	Critique and contextualise new concepts such as the	2	#6-16	Presentation of new concepts supported by question prompts	Teacher presents new concepts using questions as prompts to stimulate reflection on how such concepts can be applied	See resources 5-6 below	Chat function
00:45 (10 minutes)	Apply this knowledge to different business	3	#17	Activity: Paired activity applying concepts to learner's own	#17 Activity applying learning to concept of learners own business or business idea	See resources 5-6 below	Break-out room function
00:50 (5 minutes)	Learn about initiatives supporting business	4	#18-19	Presentation and invitation for further engagement	Reflections added in chat	See resources 7-8 below.	Chat function

NBS- Application of Curriculum, Trends and Skills

Curriculum integration (how it may connect to curriculum)	
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<p>Teaching & Learning Trends employed</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>

Author and organisation to credit when using the LU	Centre for Social Innovation, Trinity Business School, Trinity College Dublin
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NBS Keywords Checklist (tick here below)

x	<i>Forest Preservation</i>
x	<i>Forest Restoration</i>
	<i>Forest enhanced management for woodfuel harvest</i>
	<i>Forest Production</i>
	<i>Grassland Preservation</i>
	<i>Grassland Restoration</i>
	<i>Grassland grazing management</i>
x	<i>Coastal Preservation</i>
x	<i>Coastal Restoration</i>
	<i>Coastal maintenance of slope vegetation</i>
	<i>Maintenance of coastal, floodplain and riverine vegetation</i>
x	<i>Agroforestry</i>
x	<i>Reduce tillage and carbon restoration practices</i>
	<i>Agricultural intensification</i>
	<i>Urban forests and green spaces</i>
x	<i>Urban green roofs</i>
x	Climate-change adaptation and mitigation
x	Sustainable cities/ sustainable communities
x	Re-naturing cities/ re-naturing communities
	Urban regeneration
x	Coastal resilience
	Multi-functional watershed management
	Enhancing the insurance value of ecosystems
	Sustainability of the use of matter and energy
x	Sustainable development
x	Innovating with nature
x	Biodiversity

(If 'Notes' are used in the related PowerPoint presentation	Resources (e.g. academic articles or
	1. Framing the Nature Positive
	2. Adapt to Survive: Business T
	3. Managing Nature Risks: Sou
	4 New Nature Economy Series:
	5. Kooijman, E.D.; McQuaid, S.
	6. McQuaid, S.; Kooijman, E.D.
	7. Website: GoNaturePositive!
	8. Website: Connecting Nature

x	Nature-based enterprises	
x	Nature-based entrepreneurship	
	NBS and new business and investment models	
x	Citizen participation, stakeholder/community consultation	
x	Disaster risk reduction	
x	Risk management and resilience	
x	NBS policy development and implementation	
x	NBS research	
x	Green infrastructure	
	Green finance / sustainable finance	
x	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	
x	NBS and new business and investment models	
	NBS and CCAM (Connected, Cooperative and Automated Mobility)	
	Other 1: (Please specify)	Restorative Ecology
	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.

