

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		Business models for Nature-based Enterprises: PART II COSTS & REVENUE GENERATION					
NBS Context (e.g. urban rural, coastal)	NBS keywords <u>complete checklist at the end of the document</u>	Other Keywords (topics other than NBS) <u>add in Other below</u>	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	NbE		Professional	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)
Business Sustainability	Professional	n/a	Professional	None	EQF 6 - Irish NFQ 7/8 Ordinary/H	50 minutes	Online
Purpose	To learn about business models for Nature-based Enterprises, analyse and apply these in practice						
LU Summary (2-3 sentences)	This learning unit is a continuation of the previous unit on business models and the business model canvas. Participants will be reminded of the different types of BMC tools available and given a deep dive into the bottom segment of the business model canvas - capturing value, cost structure and cost reduction. They will apply these learnings directly to their own business context and finalise their business model canvas template.						
Learning Outcome 1	Recap on different types of business model canvas (BMC) tools available.						
Learning Outcome 2	Dive deeper into the elements of the business model canvas relating to generating revenue and investigate different cost structures.						
Learning Outcome 3	Apply this knowledge to your business.						
Learning Outcome 4	Complete the BMC (from previous learning unit) to evaluate different options for generating revenue and investigate different cost structures as well as cost reduction methods.						

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,)
00:10 (10 min)	Recap of the	1,2	#1-7	Present context	Followed by activity confirming	See resources	
00:20 (10)	Identify the type	3	#8	Activity: Group or	#8 Interactive activity applying	See resources	Break-out
00:35 (15)	Explain cost	1,2	#9-15	Explanation of	Examples followed by learning	See resources below	
00:45 (10)	Building your	4	#16	Activity: Group or	#16 Activity applying learning to	See resources below	Break-out
00:50 (5)	Reflect on	3	#17-19	Presentation and	Reflections added in chat / oepn		Chat function

Curriculum integration (how it may connect to curriculum)	
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Teaching & Learning Trends employed	<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><u>Highlight all that apply</u></p> <p>(Source)</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>
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*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</p> <p><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>
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<p>GreenComp - European Sustainability Competency Framework</p> <p><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>
<p>Author and organisation to credit when using the LU</p>						

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Checklist (tick

	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

used for syllabus or further

Resource Citation	Link
Magretta, J. 2002. Why business mo	
Osterwalder, A., Pigneur, Y., & Tucci, Strategyzer, The Business Model Car	
Connecting Nature, Nature-Based So	
Kampelmann, S. (2021). Knock on w	

	Agroforestry
	Reduce tillage and carbon restoration practices
	Agricultural intensification
	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 entrepreneurship
	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.*

[C. \(2005\). Clarifying Business Models: Origins, Present, and Future of the Concept. Communications of the Association for](#)

[Business models for urban wood could overcome financing and governance challenges faced by nature-based solutions](#)

[ons. *Urban Forestry & Urban Greening*, 62, 127108. https://doi.org/10.1016/j.ufug.2021.127108](https://doi.org/10.1016/j.ufug.2021.127108)