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Module 3. Learning resources for the development of sustainability skills

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Learning objectives	Once learners have completed this module, they will gain: - Knowledge: On sustainable tourism in relation to the environment, socio-cultural dimensions, and economic trends and best practices. - Skills: In relation to the sustainable management of various forms of tourist enterprises. Attitudes: Of proactive and creative engagement with sustainable tourism.
Methods	The module is based on learning and teaching material produced in the ESTET project. Autonomous Learning: Learners will cover the ESTET videos and WebQuests. Active Learning: By attending practical training sessions in areas of interest and engaging with one or more service-learning project (SLP)
Time schedule	8 hours



Introduction

The module is centred on the three main pillars of sustainable tourism including the environmental, the socio-cultural, and the economic. Thereby, it adopts the triple-bottom-line approach of planet, people, and profit.

The tourism industry employs about 11% of the global workforce. While this contributes significantly to better living standards for many people, the industry is also responsible for about 8-11% of global GreenHouse Gas emissions (GHG). This poses a tremendous challenge to the sustainability of the planet we live on, especially when climate change is predominantly described as an energy problem. Moreover, tourism does not only pose a challenge to the environment, but also to local communities and cultural heritage under the pressure of unprecedented mass tourism. In fact, in 2019, or one year prior to the Covid 19 pandemic, tourist numbers reached 1.4 billion (Blowfield, 2013; Blowfield & Murray, 2019; UNWTO, 2021).

Considering this wider framework, the tourism industry is situated in, this module introduces, explores, and analyses some of the main concepts, challenges and best practices in the field of sustainable tourism. It does this by adopting a holistic approach that links the environmental, socio-cultural, and economic aspects based on learning and teaching material developed by the ESTET partners through extensive and up-to-date research.

The module can be incorporated into curricula intended for training the trainers, specifically VET and IVET instructors and teachers. Additionally, the units and subunits of the module can be integrated into existing VET and IVET curricula whether the programme is focused on specifically sustainable tourism or a different programme that aims to include a sustainability dimension.

All Videos, WebQuests, and Service-Learning Projects can be found on the ESTET website
<http://estet-project.com/>

3.1 Module Overview

This module focuses on developing skills and ability of VET teachers to exploit interactive digital resources and to collaborate with external stakeholders (community partners) in order to enhance and stimulate the inclusion of new and needed sustainability-related skills in the current courses and curricula. The module is centred on three units that represent the three pillars of sustainable tourism. These include the environmental, the socio-cultural, and the economic areas. Combined, these units provide a comprehensive overview of the main challenges inherent to the tourism sector, and some of the most effective and innovative ways to confront and overcome these challenges.

Unit 1, the Environment and Sustainable Tourism, begins with an exploration of the challenges the tourism sector faces and the wider environmental context in which it is situated, especially in relation

to climate change and biodiversity. In 2019, one year prior to the Covid-19 pandemic, the number of tourists reached 1.5 billion, signifying the importance of achieving sustainable tourism towards combating climate change and the protection of biodiversity. As such, Unit 1 then moves onto providing practical skills, as well as conceptual knowledge, that enable a more sustainable engagement within the tourism sector by various touristic actors and enterprises. This is achieved by exploring some of the best practises in energy, waste, water management, and eco-friendly transport.

Unit 2, Socio-Cultural Dimensions and Sustainable Tourism with focus on local communities and cultural heritage. In local communities, the aims include mitigating negative impacts of tourism on host communities and helping them to maintain their customs, traditional lifestyle, and authenticity, while celebrating the positive economic outcomes. On an interrelated level, engaging and involving local communities is essential for the development and successful operation of tourism whereby the natural and cultural heritage of the destination can be preserved. Unit 2 then moves onto the management, protection, and preservation of World Heritage Sites as invaluable heritage destinations that attract vast numbers of tourists each year, especially that many of these sites are at risk of deterioration without adequate management and protection.

Unit 3, The Economy and Sustainable Tourism, emphasises best practises and emerging trends related to the shift from a linear economy to a circular economy. While cradle-to-grave business models were dominant up until relatively recently, more and more organisations have been shifting to a cradle-to-cradle model where products and services are given a new life rather than disposed of. The Unit then moves onto practical methods that enable confronting the sustainability challenge such as local production and consumption with its vast impact and energy and resources, as well as the sharing economy based on collective usage of products and services.

3.2 Topics for Curriculum/Programme in Sustainable Tourism and sustainability-related skills

In order to develop a new programme or further improve an already existing course in the field of sustainability-related skill in tourism topics that can be used and included in the curriculum are the following:

- a. The Environment and Sustainable Tourism
- b. Socio-Cultural Dimensions and Sustainable Tourism
- c. The Economy and Sustainable Tourism

The topics are developed based on the 3 pillars of sustainable tourism and include various aspects and important elements that are crucial and highly relevant in the tourism sector. Further, additional information regarding the resources and materials that can be used are described. The list of topics and resources can be used partially or entirely. It can be used as a basis for structuring and developing new courses or they can be used to build-up and further improve already available courses. With regards to the resources, they can also be used entirely as they are listed below or only some of them can be selected, depending on the specific requirements and needs of the course.

3.2.A. The Environment and Sustainable Tourism

A.1 Greenhouse Gas Emissions (GHG): Refer to the video script “Greenhouse Gas Emissions (GHG)” and to the core level WebQuest “Global Warming”. If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Here Comes the Sun”.

A.2 Biodiversity: Refer to video script “Biodiversity” and to the core level WebQuest “Biodiversity and Sustainable Tourism”. If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Practice Ecotourism, Protect our Future”

A.3 Energy Management: Refer to video script “Energy Management” and the core level WebQuest “Save Energy, Become Sustainable”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Energy Management in a Sustainable Hotel”.

A.4 Waste Management and 3R's: Refer to video script “Waste Management and the 3Rs” and the core level WebQuest “ReWaste”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Don't Waste the Waste”.

A.5 Water Management: Refer to video script “Water Management” and to the core level WebQuest “Water: Sustainable Use and Stewardship” If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Become a sustainable water manager!”.

A.6 Eco-Friendly Transport: Refer to the video script “Eco-Friendly Transport” and to the core level WebQuest “Go Green on Vacation” If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Hotel Strategy for the Promotion of Eco-Friendly Transport”.

3.2.B. Socio-Cultural Dimensions and Sustainable Tourism

B.1 Protecting Local Culture: Refer to video script “Sustainable tourism and Protection of Local Culture” and the core level WebQuest “Sustainable tourism and Protection of Local Culture”. If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Sustainable tourism and Protection of Local Culture - Advanced level”.

B.2 Protecting Local Communities: Refer to video script “Protecting local communities” and to the core level WebQuest “Reduce Your Own Travel Impact and Help Combat Over Tourism”. If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Setting Recommendations to Protect Local Communities from Overtourism”

B.3 Involving Local Communities: Refer to video script “Involving Local communities” and to the core level WebQuest “Engaging Local Communities: Benefits and Challenges” If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Community Online Engagement Plan”

B.4 Protecting Communities

Refer to video script “Protecting communities” and to the core level WebQuest “Reduce your own travel impact and help combat overtourism” If this area is of particular interest to you, your teaching,

or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Setting recommendations to protect local communities from overtourism”

B.5 Protecting Local Culture and Heritage Sites: Refer to video script “Sustainable tourism, Local Culture & Heritage Sites” and to the core level WebQuest “Sustainable tourism and protection of Local Culture & Heritage Sites 1-core level”. If this area is of particular interest to you, your teaching, or is helpful for an enterprise you are connected to, refer to the advanced level WebQuest “Sustainable tourism and protection of Local Culture & Heritage Sites 1-advanced level”.

B.6 Value of World Heritage Sites: Refer to video script “World Heritage Sites I” and the core level WebQuest “The Value of World Heritage Sites”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Management of World Heritage Sites”.

B.7 Threats to World Heritage Sites: Refer to video script “World Heritage Sites II” and the core level WebQuest “Threats to World Heritage Sites”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Stakeholders Management and Involvement in World Heritage Sites”.

3.2.C The Economy and Sustainable Tourism

C.1 Circular Economy: Refer to video script “Circular Economy” and the core level WebQuest “Clean and Green – The Circular Economy”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Green Business Model Canvas”.

C.2 Local Products and Purchasing: Refer to the video script “Local Products and Purchasing” and the core level WebQuest “Local Products and Purchasing – Basic Level”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Local Products and Purchasing – Advanced Level”.

C.3 Sharing Economy: Refer to the video script “Sharing Economy” and the core level WebQuest “Share and Share Alike”. If this area is of particular interest to you, your teaching, or an enterprise you are connected to, refer to the advanced level WebQuest “Sharing Economy Advocacy Campaign”.

C.4 Sustainable innovation: Refer to video script “Sustainable innovation”.

C.5 Onsite recycling: Refer to video script “Onsite recycling”.

C.6 Local Hiring: Refer to video script “Local Hiring”.

3.3. Service-Learning Projects

For trainers, instructors, and/or learners who are interested in developing their knowledge, skills, and expertise further in any of these areas (beyond this eight-hour module), refer to the Service-Learning Projects (SLP) at <http://estet-project.com/>. There is an SLP corresponding to each sub-unit included in the three units above. The SLPs are intended to equip trainers and learners with hands-on experience through direct engagement in the tourism sector where one can apply and build on the multiple concepts and skills explored in this module. This can involve engagement with a tourist enterprise, a municipality, local government, a non-governmental organisation, among others. The length and form of the engagement can vary, for example as a volunteer for several days, and there are several scenarios in the SLPs to suit different needs and skill sets.



3.4. Integrating the Module into the Curricula

This module can be integrated into existing or planned curricula at varying degrees. In the countries of the participating partners of the ESTET project, which include Bulgaria, France, Greece, Ireland, Italy, and Poland, the integration of sustainable tourism in the curricula ranged from weak to strong. This conclusion is based on a review of existing curricula and focus groups held with VET providers as part of the ESTET Conceptual Framework. However, the ESTET project does not claim that this is representative of all VET providers in the participating countries. Yet, this process revealed that the integration of sustainable tourism was the weakest in the case of Poland and the strongest in the case of France.

In more concrete terms, the research carried out by the ESTET project as part of the Conceptual Framework revealed that a sustainable tourism module may need to be wholly integrated in some European countries, or only partially integrated in others. This integration serves the purpose of connecting sustainable tourism education with the needs of tourism enterprises and business, and ultimately contributing to a more sustainable tourism sector.

3.5. Countries with a Weak Sustainable Tourism Component

In countries where sustainable tourism is a weak or an absent component of the curricula, we recommend creating a course specifically on sustainable tourism based on this module. If the structure of the curricula or government regulations do not allow for an additional course, we recommend adding certain units or sub-units of the module to already existing modules based on the most pressing needs of the tourism sector in your target country. For guidance in this process, the Conceptual Framework provides an overview of what tourism enterprises consider to be essential sustainability skills that workers and employees should possess. The Conceptual Framework covers Bulgaria, France, Greece, Ireland, Italy, and Poland. If your country is not among these, we recommend that you carry out your own research from primary or secondary sources to determine your precise needs. You may find information relevant to your country published by UNESCO and UNWTO, among others.

On the other hand, if it is absolutely impossible to integrate the module or components of it into your curricula, we recommend at least highlighting the service learning projects in your teaching. The Conceptual Framework also revealed that there is a dire need to connect VET students and tourism enterprises with placements, internships, and hands-on training. The service-learning projects adequately cater to this end.

3.6 Countries with a Moderate Sustainable Tourism Component

VET providers in countries that integrate sustainable tourism into the curricula to some extent may consider having a course specifically on sustainable tourism based on this module, or integrate units or sub-units of the module based on identified needs. VET providers in these countries may already have mechanisms in place for integrating sustainable tourism or mainstreaming it into the education system. However, according to the Conceptual Framework, countries that fall in this range (moderate

integration) still face some challenges. Focus groups with VET providers and tourism enterprises conducted by the ESTET partners revealed that there is a need for more collaboration between VET providers, government institutions, and tourism businesses in order to secure placements that will enable students to put their sustainability education into practice. Moreover, VET teachers can propose to management of the VET provider to develop such connections to secure effective placements, but also for service learning projects. Please refer to the Focus Groups sections of the Conceptual Framework for a better understanding of this challenge, as well as possible ways to overcome it.

3.7 Countries with a Strong Sustainable Tourism Component

VET providers with a strong integration of sustainable tourism in the education system may still find some of the units and subunits of this module useful for strengthening already existing modules, for diversifying the teaching material, or possibly for innovation in teaching and learning methods. Similar to countries with moderate integration of sustainable tourism, focus groups with VET providers and tourism enterprises conducted by the ESTET partners revealed that there is a need for more collaboration between VET providers, government institutions, and tourism businesses in order to secure placements that will enable students to put their sustainability education into practice. Please refer to the focus groups section of the Conceptual Framework for a better understanding of this challenge, as well as possible ways to overcome it.

3.8 Common Thread

Regardless of the level of integration of sustainable tourism in your target country, the Conceptual Framework revealed some of the best practises among VET providers in relation to sustainability. As a VET teacher, you may propose to your students and to management projects and practises that cultivate sustainability skills by doing. For example, you may promote recycling in your VET institution if it is not already in place. You could also promote a bicycle scheme as a means of eco-friendly transport. Moreover, you can design a project that equips students with green skills such as growing a green roof on the premises of the VET institution. A teacher could also, with relatively little time and effort, raise awareness on eco-efficient habits such as turning off lights when the classroom is not in use. These green skills, which are learnt by doing rather than in class, will further prove their benefit once students move onto the work world.

Useful links

The video scripts, WebQuests and Service Learning Projects included in this module can be found on the ESTET website

Kusumawardhana, I. (2019). Curriculum development in hospitality and tourism higher education: challenges and gaps.
doi:10.4108/eai13-2-2019.2286505

ESTET Website

<http://estet-project.com/>

O'Connor, N. (2021, November). *Using active learning strategies on travel and tourism higher education programmes in Ireland*. Journal of hospitality, leisure, sport and tourism education, Volume 29. Retrieved from <https://www.sciencedirect.com/science/article/pii/S1473837621000277>

Tomasi, S., Paviotti, G., & Cavicchi, A. (2020, August 20). *Educational tourism and local development: the role of universities*. MDPI Sustainability. Retrieved from <http://mdpi.com>

UNEP. (2015). What is an 'Inclusive Green Economy'? Retrieved from <https://web.unep.org/greeneconomy/what-inclusive-green-economy>

UNWTO. (2013). *Sustainable tourism for development guidebook*. Retrieved from <http://icr.unwto.org/en/content/guidebook-sustainable-tourism-development>

Summary of key points

The module explores theoretical and practical aspects of sustainable tourism and in particular, the use of innovative learning resources to adapt current curricula to market needs and thus, to enhance the development of sustainable-related skills. These aspects include environmental, socio-cultural, and economic areas. Combined together these pillars will equip learners of these modules with the necessary knowledge, skills, and attitudes for strengthening their curricula and enhancing their teaching material in relation to sustainable tourism.

Self-assessment questions

Question 1: Title of question- 3Rs

Content of question: Define the 3RS

Answer 1	Reduce, Recycle, Redistribute
Answer 2	Reduce, Reuse, Redistribute
Answer 3	Reduce, Reuse, Recycle
Answer 4	Reuse, Recycle, Revolve
Answer 5	Reduce, Recycle, Renovate
Correct answer(s)	Reduce, Reuse, Recycle

Question 2: Title of question- Involving Local Communities

Content of question: Involving local communities does Not include

Answer 1	Participation in the nomination of world heritage sites
Answer 2	Purchasing from local communities

Answer 3	Working in tourist enterprises
Answer 4	Using photos of local communities for tourist site promotion without their consent
Answer 5	Coordination with the municipality
Correct answer(s)	Using photos of local communities for tourist site promotion without their consent

Question 3: Title of question- World Heritage Sites (WHS)

Content of question Managing Visitors to WHS

Answer 1	By only allowing locals into the site
Answer 2	By only allowing tourists into the site
Answer 3	By setting a quota for the number of visitors
Answer 4	By limiting the sale of tickets in peak seasons
Answer 5	By permanently closing the site to visitors
Correct answer(s)	Answers 3 and 4 are correct

Question 4: Title of question- Eco-Friendly Transport

Content of question: Eco-Friendly Transport does

Not include

Answer 1	Using electric vehicles
Answer 2	Using public transport
Answer 3	Using a bicycle
Answer 4	Cruise ships
Answer 5	Car pooling
Correct answer(s)	Cruise ships

Question 5: Title of question -Sharing Economy

Content of question: The sharing economy:

Answer 1	Saves money and resources
Answer 2	Is a more efficient allocation of resources, as opposed to the linear economy
Answer 3	It empowers entrepreneurs and stimulates start-up companies
Answer 4	Is based on shared production and consumption of goods
Answer 5	All of the above
Correct answer(s)	All of the above

Question 6: Title of question- Learning resources for the development of sustainability skills

1. How many types of learning resources are offered in this module?

Correct answer: Web-quests, Videos, Self-learning Projects

2. How many are Web-quest levels?

Correct answer: 2 levels – core and advances

3. Which are the three main units/pillars of sustainable tourism?

Correct answer: Environment and Sustainable Tourism, Socio-cultural Dimensions and Sustainable Tourism, and The Economy and Sustainable Tourism

4. What is the main aim of the Self-Learning Project?

Correct answer: To equip trainers and learners with hands-on experience through direct engagement in the tourism sector

5. How many degrees/levels of integration of this module into the existing curriculum are presented?

Correct answer: Three

Bibliography

1 ESTET. (2021, December 10). *Intellectual Output 2. Embedding Sustainability Skills in Tourism Education and Training (ESTET)*. www.estet-project.com

2 Blowfield, M. & Murray, A. (2019). *Corporate Social Responsibility*. Oxford University Press.

3 Blowfield, M. (2013). *Business and Sustainability*. Oxford University Press.

4 International Tourist Arrivals Reach 1.4 Billion Two Years Ahead of Forecast. (2021). UNWTO. <https://www.unwto.org/global/press-release/2019-01-21/international-tourist-arrivals-reach-14-billion-two-years-ahead-forecasts>

5 Tourism's Carbon Emissions Measured in Landmark Report Launched at COP25. (2021). WTO. <https://www.unwto.org/news/tourisms-carbon-emissions-measured-in-landmark-report-launched-at-cop25>

