

















How to put SDGs into practice in the classroom through digital tools

September 2024

Author: AMYCOS.org

Contributors: MCE, Odisee, Rosto Solidario



sustainabilitymakers.eu

The "SusTAInability makeRs, the WAY to Sustainable **Development Goals - 3.0"** project is co-financed by the Erasmus+ program of the European Union. The content of this publication is the exclusive responsibility of the authors and neither the European Commission nor the Spanish Service for the Internationalization of Education (SEPIE) are responsible for the use that may be made of the information disseminated here.



The "SusTAInability makeRs, the WAY to Sustainable Development Goals - 3.0" KA 2021-1-ES01-KA220-VET-000025741

Project Coordinator: Amycos.org More info: europa@amycos.org www.amycos.org









ATTRIBUTION NON COMERCIAL SHARE ALIKE

You are free to Share, copy and redistribute this publication in any medium or format. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may not use the material for commercial purposes. If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.









O. INDEX

1. INTRODUCTION	4
2. CONCEPTS FRAMEWORK	5
2.1. The 5Ps of the 2030 Agenda for Sustainable Development	5
2.2. Experiential learning based on action areas to change behavior	5
2.3. Sustainability competencies and Learning Objectives	7
2.4. The role of digital technologies in education	7
3. PRACTICAL GUIDE FOR TEACHERS	8
3.1. Three Stages	8
3.2. Learning Pathway and Educational Activities	9
3.3. Educational Activities	10
4. HOW TO PUT IT INTO PRACTICE?	11
5. OVERVIEW OF ACTIVITIES	13
6. LESSONS LEARNED TOGHETER	17
6.1. Belgium	17
6.2. Greece	20
6.3. Italy	23
6.4. Portugal	26
6.5. Romania	29
6.6. Spain	32
7. REFERENCES	37

1. INTRODUCTION

Who is this for?

If you are a VET teacher and eager to engage your students in a sustainable approach to their current or future jobs, "Stairway to SDG" can assist you in integrating one or more Sustainable Development Goals (SDGs) into your students' learning process. This step-by-step handbook will guide you in utilizing the digital tools developed by the project.

What is the purpose?

This handbook's purpose is to provide high-quality digital tools, and guidelines for a flexible educational path. Based on blended learning, it aims to improve the digital competencies for all the actors of the educational community and to increase their awareness about the SDGs.

Which tools are described in this handbook?

- → The **e-learning platform** called **sustainabilitymakers.eu** designed to provide an online educational experience through specific e-modules for each SDG and,
- → The **2D game** called **Sustainability Challenge** designed to engage the students to explore sustainability through 6 different challenges.

Why are the platform and the game important?

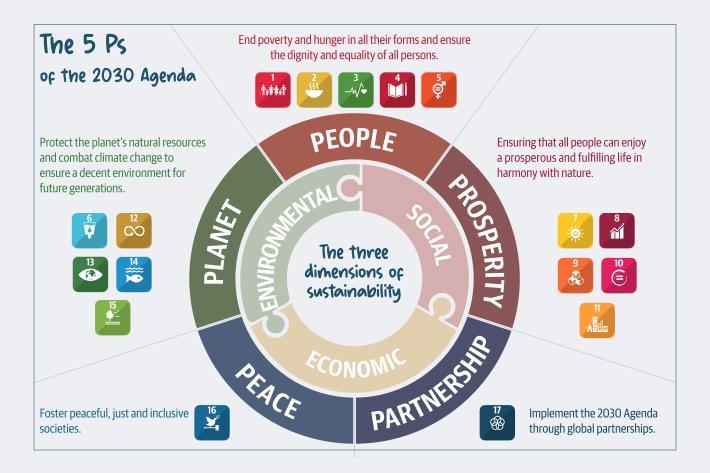
The Stairway to SDG approach is based on transformative education that focuses on behavioral change through reflection and action. To ensure an effective behavioral change, it is necessary to plan the learning process of the students in the medium-long term by integrating the activities and the indicators proposed by the project into the lesson plans of different training courses. By spreading the content over different courses within their field of study, students learn to see that sustainability plays a role in every aspect of life.

What is my role in this?

As VET sectors, curriculums, and national contexts are very wide and diverse it is not possible to create one plan that fits all. In the following pages, we propose a step-by-step path that you have to adapt to your context and students, with the idea that if we teach students to be responsible people, we can transform our society into a sustainable community.

2. CONCEPTS FRAMEWORK

This methodological approach is based on a set of assumptions related to Experiential Learning (Beard & Wilson, 2002), Sustainability Competencies based on Wiek (2011), Learning Objectives based on UNESCO (2017) and Understanding the role of digital technologies in education (A. Haleem, M. Javaid, M.A. Qadri, R. Suman).



2.1. The 5Ps of the 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared an action plan for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

- → **People** We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.
- → **Planet** We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.
- → **Prosperity** We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

- → **Peace** We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.
- → **Partnership** We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized. If we realize our ambitions across the full extent of the Agenda, the lives of all will be profoundly improved and our world will be transformed for the better.

2.2. Experiential learning based on action areas to change behavior

Experiential Learning can be defined as a "person-focused, supported approach to individual, group, or organizational development, which engages the young or adult learner, using the elements of action, reflection, and transfer" (Beard & Wilson, 2002). Building on learner's former experiences, everyone within the group should be guided by the facilitators to engage in effective learning exercises following a four-step cycle called the Experiential Learning Cycle (Kolb,1984):

- 1) Concrete Experience;
- 2) Observation and reflection;
- 3) Forming Abstract Concepts;
- 4) Testing in new situations.

According to this approach, the **first step** should allow learners to experience a new situation or to reinterpret an existing experience. The **second step** should guide learners to remember, describe and understand that experience. In **step three** learners are invited to reflect on their own experience looking for patterns and overall conclusions and its links to the "real world". Finally, in **step four** learners have the chance to find ways to apply conclusions to the world around them and their personal lives (Kolb, 1984). This step has crucial relevance to learning consolidations and can trigger new learning cycles and change behaviors.

Our proposal includes **three action areas for each SDG**. The action areas were created based on a participative approach that includes a reflection from teachers and sustainability experts. This approach recognizes the relevance of working on the SDGs starting from the concrete experience and daily life of the learners (step 1), creating the opportunity to reflect and conceptualize (step 2 and 3) and putting sustainable solutions into practice (step 4).

Action areas are used because there is a need to "translate" the SDGs from several thematic fields, many of them associated with macro policy-making levels, to an individual level to promote personal responsibility and commitment. Actions are concrete and measurable, and are directly connected to people's behavior and not only with their ideas, thoughts or opinions. Our Action Areas have aspects in common with driving forces for sustainable daily life actions¹ and, if we want to promote sustainability, we have to reinforce individual responsibility and active participation.

2.3. Sustainability competencies and Learning Objectives

"We are in the early stages of a fundamental and globally pervasive transformation in the interactions of humans, their institutions, the technologies they have created, and the environment that provides both the home and the resources that make it all possible." (Wiek et al., 2011).

^{1 (}Smith-Sebasto & D'Acosta, 1995; Monroe, 2003): a. Civic action (e.g., voting, petition signing) b. Educational action (e.g., looking up information, reading) c. Financial action (e.g., donating money, boycotting a company or product) d. Legal action (e.g., using the legal system to force compliance with environmental law) e. Persuasive action (e.g., advocacy, letter writing) f. Direct behavior i. Making a one-time purchase (e.g., buying an Energy Star appliance or insulating a home) ii. Making a frequent purchase (e.g., consistently buying locally produced goods) iii. Curtailing or ending a certain type of behavior (e.g., driving less) iv. Substituting a new for an old behavior (e.g., biking instead of driving) v. Making a behavior more efficient (e.g., carpooling instead of driving alone).

There is a general consensus that sustainability is related to **key competencies** that allow citizens to engage constructively and responsibly in today's world. Key competencies are necessary for all learners of all ages worldwide (developed at different age-appropriate levels). They can be understood as transversal, multifunctional and context-independent.

In the case of this project, we use a validated set of sustainability competences: Systems thinking competence; Anticipatory competence; Normative competence; Strategic management and action competence; Interpersonal competence; Embracing diversity and Interdisciplinary competence.

In this approach, we consider UNESCO learning objectives defined by SDG that include cognitive, socioemotional and behavioral domains. The cognitive domain is related to knowledge and thinking skills. The socioemotional domain is related to social and self-reflection skills, values, attitudes and motivations. The behavioral domain describes concrete action competencies.

2.4. The role of digital technologies in education

In today's society, digital tools and gamification have become increasingly prevalent in various aspects of our lives, including education. These technologies offer unique opportunities for enhancing the learning experience and engaging students in a way that traditional teaching methods often struggle to achieve. The value of digital tools and gamification lies in their ability to promote active learning, increase student motivation, and provide personalized and adaptive learning experiences.

Active learning is an essential aspect of the education process. It involves engaging students in activities that require them to think critically, problem-solve, and apply knowledge to real-world situations. Digital tools and gamification provide educators with a wide range of interactive resources that can promote active learning in the classroom.

For example, our e-learning platform and 2D game offer students the opportunity to explore information, complete quizzes and exercises, and collaborate with their peers. These tools encourage students to actively engage with the content and take ownership of their learning. The use of digital tools also allows for personalized learning experiences, as students can progress at their own pace and receive immediate feedback on their performance. Furthermore, gamification has gained popularity in recent years as a method of engaging students and fostering motivation.

The use and implementation of technological tools converge day to day towards an education mediated by information technologies and communication (ICT).

The educational methodologies usually used require a high degree of innovation in order to implement improvements in educational originality and not replace them completely and thus generate an environment of innovation within the academic context (Hamari, Koivisto, & Sarsa, 2014). Definitely, the technological advances related to the learning process give rise to the calls "digital challenges" (Roosta, Taghiyareh, & Mosharraf, 2016), where our project inserts to improve the digital competencies of our Sustainability Makers.

Blended learning strategies STEM PROJECTS **FACE TO FACE DIGITAL** INTERACTIVE FLASHCARDS POSTERBOARDS PODCASTS COLLABORATION ONLINE INTERACTIVE ART PROJECTS R=8 SLIDE PRESENTATION CONFERENCE = 0 0 RESEARCH </> 17 DEVELOPMENT DIRECT ONLINE DISCUSSIONS

3. PRACTICAL GUIDE FOR TEACHERS

In the following pages we set out a step-by-step path based on your needs, curriculum and subjects to plan activities with your class. Here we outline four options for the education activities as a basis for your planning.

3.1. Three Stages

We propose a flexible process based on three stages to be developed directly with the students:

- ▶ Initial assessment to check the behaviors of the students as a pre-test. This can be done with other tools but the app that we developed in the previous project www.stairwaytosdg.eu can be a useful and practical way to do it. It's important to use this as a self-assessment for the student and to collect more information to prepare for the next stage.
- Learning process this is the heart of the project and in our digital tools. We have developed a set of educational activities with different options, as you can read below. For this, you have to be aware of the context (the students, curriculum, etc.), and the time available to do work on this content. Optionally, you can select certain SDGs or specific activities you want to work on;
- **Final assessment** to check the behavioral change that occurs in the student's life during the learning process. This isn't a summative evaluation method but a way of making students aware of their evolution during the learning process. In a formal educational context, you can evaluate this through a paper, a test, etc. but we provide the app as a we formative evaluation tool.

Evidently, before starting to use these digital tools in the classroom, the teachers and trainers need to do a short assessment and plan the activities with the students taking into consideration the time, the curriculum, the target group, local context and any specific needs related to these or other aspects.

In order to facilitate the learning process and the initial and final self-assessment, we included a plug-in to connect with the app of the previous project in the new e-learning platform *sustainabilitymakers.eu*, avoiding double registration and increasing the effectiveness, quality, and sustainability of our digital tools.

1 - Initial Assessment	2 - Learning Process	3 - Final Assessment
Арр	Introduction e-module + 17 SDG-specific e-modules + Evaluation e-module + 2D game	Арр
E-Lea	rning Platform: sustainabilitymak	ers.eu

3.2. Learning Pathway and Educational Activities

All the activities and tools on the e-learning platform can be used separately, but to have a stronger impact we recommend following one of three paths: simple, intermediate, and expert.

First of all, take into consideration the time available and the desired learning pathway and choose your option. Don't be afraid about the number of sessions, and don't forget that this is an e-learning platform: you can ask your students to carry out some parts of the session at home. We calculated 50 minutes for each session but the time to carry out the activities is an estimation, there are different variables that can change it. Also, as a teacher, you can decide to speed up or reduce the time necessary for your students. Our perspective is based on blended learning: a combination of face-to-face and online classes designed mainly for a target group from 16 to 25 years old. Take this into consideration when you are planning your lessons and check our tips in order to adapt the activities to your context.

	Learning Pathway		
	A / Simple	B / Intermediate	C / Expert
Nº of SDGs on going	1	2 or more	1 for each P ²
N ^o of sessions provided	7 - 10	11 - 17	+ 20
Timeframe	3 to 5 months	5 to 10 months	10 months

Also, these tools can increase their effectiveness if they are used by more teachers in your study program. Clearly it needs coordination among the teachers in order to avoid overlapping.

In this way you are working on "intermediate" or "Expert" pathways and probably you can reduce the time dedicated in your own class, planning and sharing with more teachers the use of the e-learning platform.

Why not do it by involving your center? Now this is an amazing innovation!!

² The 17 SDGs are grouped into 5 subgroups / themes: People, Planet, Prosperity, Peace, Partnerships.

3.3. Educational Activities

	Educational Activition	es	
	A / Simple	B / Intermediate	C / Expert
Presentation and registering	1	1	1
Introductory e-module	1	1	1
Specific SDG e-module	4 - 7 + Call to Action	8 - 14 + Call to Action	20 + Call to Action
Evaluation e-module	1	1	1
2D Game	3	3	3
Timeframe	3 to 5 months	5 to 10 months	10 months

- **Presentation and registering.** The first step will be to register yourself in the e-learning platform defining your role as "Trainer". Once inside the platform you have the opportunity to create your profile, check the contents and the tips for you in each section of the different modules. Understand the platform, the contents and plan the proposal for your students!!
- Introductory e-module. We have prepared a specific module to introduce the concepts and importance of the SDGs in less than 1 hour. In general, the activity pretends to create a common understanding about the Agenda 2030 in order to give you a standard base to work successively in your specific topics. The debriefing with your student will be the key!!
- ▶ Specific sessions. You know the SDG that you want to work on and you have to plan several sessions to create a "snowball" process of increasing complexity. The first thing is to do an initial assessment³ with your trainee and you can use our APP. After, you have to follow the indications of each e-module, defining which session you want to work in class and which one leaves autonomy to the trainee. Each e-module is passing for three steps:
 - Know: introduces the topics related to the SDG and has the objective of providing deeper insight and knowledge to learners.
 - **Explore:** is focused on the Action Areas related to the SDG. It includes three different activities and the aim is to connect theory to real life problems.
 - Act: contains a Call to Action⁴ propose encouraging learners to develop some concrete actions to face the challenges that have been explored in the previous sections. Moreover, the platform enables users to share the outcomes of the call to action with other learners. To complete the different parts of the e-module takes you several weeks and sessions but it's necessary to give the time to the learners to assimilate the information, organize themselves and transform his behaviors. Don't forget to measure these changes using our APP again!!
- **Evaluation e-module.** As in all the learning process the evaluation is an important part and, in this session, you are going to discover if you and your learners are Sustainability makers, refreshing your understanding of what it entails. This module also delves into the competencies that empower you to become it in your professional and personal life. The activity should be based on a final robust debriefing to achieve and consolidate learning!!

Description 2D Game "Sustainability Challenge". The game's aim is to explore some important action areas of the SDGs related to concrete actions and practices through which the players can reflect on their daily behaviour. It offers a different way of teaching through and can be adapted to different learning styles. You can use this tool like a jolly. Depending on your context and the profile of the learners you can use it to reinforce some specific topics connected with your curriculum or why not like a deeper introduction or evaluation of the platform!!

4. HOW TO PUT IT INTO PRACTICE?

If you want to implement this process with your students it's important to plan and adapt it to your own context. To do so you need to do the following analysis:

- > 1st. Define priorities and subjects (one or more SDGs) that are relevant to your VET sector, local community context and learner's personal life;
- > 2nd. Integrate the SDGs into the curriculum because it will have a deeper impact, facilitate the learning process and it will be a win-win situation for the students' results at the end of the year.
- > 3rd. Identify alliances in your educational community (trainers, directors, families, etc.) in order to involve more people in this process.

For that you can use the following table:

Agenda	selection	How to int	egrate SDGs into o	ur course?
SDG	Action Area	Subject	Curriculum	Notes

After that it is time to plan, based on the analysis, and make some decisions:

- How long do you want to do this process? Based on this you can select the option A, B, C or design your own learning path?
- What SDGs and action areas do you want to work with?
- How many sessions do you want to do in class and how many sessions you consider that the learner can do at home individually?
- How do you want to manage the call to action?
- In which way do you want to use the 2D game?
- Who will be responsible for the sessions?
- How can you give visibility to this work in your center?

Finally, you need to schedule it and implement it and for that you can use the following table:

³ You can use the APP to measure the behavior related to just one SDG or more depending on your Learning Pathway.

⁴ Most of the call to action consists of a parallel action out of the class and/or school, (volunteering activity, an activist demonstration, a vegetable garden, a market in the school, etc.). For each SDG we propose one call to action that is interchangeable at the discretion of the trainer.

CENTRE / SCHOOL				SDGS SELECTED								*	**************************************	CTAID	>	
COURSE				Nº OF SESSIONS								''		S 02	G 3.0	
CLASS				YEAR								****	Co-f	unded by Europear	y n Union	
141		What		Who	Where						When					
Activities	SDGs	Action Areas	Subjects	Trainer / Learner	Place	W	W 2	M3	W 4 V	W 5 W	M6 W7	7 W 8	8 8	W 10	W 11	W 12
Presentation and registering																
Introductory e-module																
Specific SDG e-module (Know)																
Specific SDG e-module (Explore)																
Specific SDG e-module (Act)																
Evaluation e-module																
2D Game																

5. OVERVIEW OF ACTIVITIES

INTRO - Introduction		1 Hour		
KNOW: Concept of 'sustainable development', 5Ps (people, planet, prosperity, peace, partnerships), the 2030 Agenda				
SDG 1 - No poverty		7 - 9 Hours		
KNOW: Extreme poverty, relative poverty, dimensions of poverty	(education, nu	trition, sanitation, health)		
EXPLORE 1: Participation: Analyse poverty using a concept map: victims, causes, risks, needs, and solutions. What is your role?		oonsible consumption: case study on cocoa, or clothing: find fairer consumption options cy.		
EXPLORE 3: Citizenship: CSR. As a small business, how can you fight poverty? Define a mission, vision, values & SMART goals.		l: Create a participatory video about a local vorking with socially vulnerable groups.		
SDG 2 - No hunger		4 - 10 Hours		
KNOW: Intro to concepts of hunger, food security, malnutrition, sustainable agriculture.				
EXPLORE 1: Solidarity action: create a cookbook together, with healthy, cheap, waste-free recipes.		rainable production: industrial vs. sustainable eate your own vegetable or herb garden.		
EXPLORE 3: Conscious consumption: find tips for becoming a more sustainable/ responsible consumer and make a short video.				
SDG 3 - Good health and well-being		5 - 7 Hours		
KNOW: Intro to the importance of physical and mental health and	d a boalthy livin			
NOW. Intro to the importance of physical and mental health and	a a rieditriy iiviri	g environment.		
EXPLORE 1: Healthy lifestyle: create a 'week menu' with healthy recipes that encourage sustainable and healthy eating habits.	EXPLORE 2: Physical health: find ways to bring more movement into your daily life and make an action plan.			
EXPLORE 3: Mental well-being: what does mental health mean to you, how is mental well-being important in teams? Collect tips. lifestyle, fitness and mental well-being.				
SDG 4 - Quality education		5 - 8 Hours		
KNOW: What would your life be like if you were illiterate? What is	quality educati	on and which are its geographical differences?		
EXPLORE 1: Global action: role-play: a simulation of a debate between 5 countries/regions on quality education.		reflection: reflect on personal & professional or your dream job. Make a CV. How do you want		
EXPLORE 3: Participation: How can you, as part of the education system, contribute to quality education at your school? (video pitch)		l: Involve others: organise an event on quality students and teachers.		

SDG 5 - Gender equality

3 - 7 Hours

KNOW: Difference between equality, equity and justice. Cultural influence on gender roles and professional activities.

EXPLORE 1: Cultural identity: write about the importance of cultural identity (iceberg model) concerning gender equality. **EXPLORE 2:** Gender roles: Which professions are typical for men/women? Reflect (verbal & written) on gender roles and professional activities.

EXPLORE 3: Participation: Analyse your time use and that of others: compare results between male and female students. CALL TO ACCTION: Create a mural on the history of women's rights in your country and present your wall to other students.

SDG 6 - Clean water and sanitation

5 - 8 Hours

KNOW: Potable water, water cycle, climate change, access to water, water pollution, shortage and floSDG, algal bloom, salinisation of groundwater.

EXPLORE 1: Water efficiency: Think of ten ways to reduce your water consumption. Collect ideas and make a flyer to share with your housemates.

EXPLORE 2: Water footprint: Choose a topic (meat, clothes, rice or smartphone) and examine its life cycle: how and where is water used? Make a video in group.

EXPLORE 3: Water pollution: Does your future job/sector consume or pollute much water? How can you limit the damage? Group discussion & make a mind map.

CALL TO ACCTION: Organise a conversation with an organisation in your sector, analyse their water footprint and help save water.

SDG 7 - Affordable and clean energy

4 - 8 Hours

KNOW: Intro on fossil/renewable energy sources and energy poverty

EXPLORE 1: Energy efficiency: calculate the energy consumption of appliances (A, V, kWh). Compare + group discussion.

EXPLORE 2: Renewable energy: how much energy in your country is (not) renewable? In which energy sources could it invest more? Compare with other countries.

EXPLORE 3: Participation: Explore an initiative committed to SDG7. Write about its purpose, actions, and your opinion.

CALL TO ACCTION: Take action after 'Explore' activity. Write a news article about your action and impact. Inspire others with a sustainability newspaper.

SDG 8 - Decent work and economic growth

5 - 9 Hours

KNOW: Inclusive/sustainable economic growth, fair work, sustainable HRM, employment, value-driven leadership, youth unemployment, human trafficking, child labour and labour rights.

EXPLORE 1: Values-driven leadership: explore testimonies on good/ **EXPLORE 2:** Conscious consumption: analyse brands you are bad leadership. Analyse (lack of) value-driven leadership and long-customers of. How are they good/bad examples in terms of term consequences for victims and suggest improvements.

SDG8? Look up info on working conditions. (writing assignment)

EXPLORE 3: Sustainable entrepreneurship: Think like an entrepreneur to get an idea of what influences their decisions. What does your start-up do and what trade-offs do you have to make? Create a slide show.

CALL TO ACCTION: Customers = revenue = growth. Which organisation goes 'the extra mile' on sustainability and deserves positive words? Write a review or letter/mail.

SDG 9 - Industry, innovation and infrastructure

6 - 8 Hours

KNOW: Intro on sustainable industry, innovation and infrastructure

EXPLORE 1: Sustainable innovation: Analyse a problem, map the system (intro systems thinking). Present your system map and suggestions for improvements.

EXPLORE 2: Waste reduction: analyse the life cycle of an item and try to extend it (circular economy).

EXPLORE 3: Sustainable investing: Discover the impact of your savings and investments. Write 1-2 pages on the information you have gathered and your opinion.

CALL TO ACCTION: Sustainable innovation: Action based on the system map: write a letter/email for whoever can improve the problem by changing something.

SDG 10 - Reducing inequalities

4 - 7 Hours

KNOW: Reduced inequality (reducing inequality within and between countries), different kinds of inequality

EXPLORE 1: Communication: Interview two elderly relatives or neighbours to find out any differences between past and present. Compare.

EXPLORE 2: Conscious consumption: Look up where our food comes from: poor working conditions in distant countries, Fairtrade or other labels.

EXPLORE 3: Solidarity action: Find local initiatives fighting for equal opportunities for all.

CALL TO ACCTION: 1 day volunteering at a local organisation fighting for equal opportunities.

SDG 11 - Sustainable cities and communities

3 - 7 Hours

KNOW: Inclusive, safe, resilient and sustainable cities and communities

EXPLORE 1: Inclusive mobility: Analyse transport methSDG, how far they are, and if they are accessible to people with disabilities.

EXPLORE 2: Sustainable infrastructure: How sustainable is your environment concerning SDG 11? Is climate adaptation visible? What is good and what could be improved?

EXPLORE 3: Participation: Look up a local initiative working for SDG 11 & present why this initiative got your attention.

CALL TO ACCTION: Offer your help to an initiative for SDG 11. Be creative: organise a biscuit sale to raise money, help during an event...

SDG 12 - Responsible consumption and production

5 - 8 Hours

KNOW: Earth Overshoot Day, ecological footprint, climate change, timeline of inventions since the first industrial revolution

EXPLORE 1: Conscious consumption: Think about the social and environmental impact of a product you would buy: is there a more sustainable alternative?

EXPLORE 2: Reduce, reuse, and recycle waste: think in groups about the waste your future job generates. How is it managed? Make a report or slideshow.

EXPLORE 3: Sustainable production and consumption: What circular initiatives can be implemented in your sector? Make suggestions on paper or digitally.

CALL TO ACCTION: Organise an Eco-Market to promote sustainable production and consumption in your educational centre!

SDG 13 - Climate action

7 - 10 Hours

KNOW: Global warming, greenhouse gases and their sources, climate warming over time, adaptation vs mitigation, carbon cycle

EXPLORE 1: Greenhouse gas emissions: Calculate your own carbon footprint! Share your findings and reflect on your habits

EXPLORE 2: Sustainable living: Make a survey on sustainability in your sector and turn the responses into a podcast.

EXPLORE 3: Energy consumption: Short quiz about habits that save energy during digital activities + group discussion + tips.

CALL TO ACCTION: Analyse the impact of your sector on the environment and vice versa. Create a Charter for Sustainability for your job

SDG 14 - Life below water

5 - 8 Hours

KNOW: Impacts of climate change, pollution, ocean acidification and overfishing.

EXPLORE 1: Plastic dependency: Create an awareness campaign about plastic pollution in your sector and its impact on aquatic life. seafood and make a menu.

EXPLORE 2: Sustainable seafood and fish: Discover sustainable seafood and make a menu.

EXPLORE 3: Sustainable coastal tourism: Plan a sustainable trip to the coast (transport, accommodation, meals and activities).

CALL TO ACCTION: Beach clean-up action: contribute to cleaner oceans.

SDG 15 - Life on land	5 - 7 Hours
KNOW: Biodiversity, ecosystems, deforestation, extinction of anim	nal and plant species.
EXPLORE 1: Biodiversity: Go outside, create a local biodiversity catalogue, and explore how everything in the ecosystem is connected.	EXPLORE 2: Calculate your ecological footprint, interview an environmentally aware initiative about sustainability + group presentation.
EXPLORE 3: Sustainable food: Make an overview of foSDG, their	CALL TO ACCTION: Make a bee hotel in your garden to

SDG 16 - Peace, justice and strong institutions

5 - 8 Hours

KNOW: Rule of law, political stability, causes and forms of injustice and violence, social identity, human rights and freedoms.

EXPLORE 1: Rule of law, political stability, causes and forms of injustice and violence, social identity, human rights and freedoms. other they are right using positive communication in a role-play.

EXPLORE 2: Positive communication: 3 groups try to convince each

other they are right using positive communication in a role-play.

EXPLORE 3: Positive communication: 3 groups try to convince each **CALL TO ACCTION:** Meet a local or sector-specific initiative tackling injustice and take action.

SDG 17 - Partherships for the Goals

5 - 9 Hours

KNOW: The importance of cooperation and partnerships in achieving the SDGs.

origin, and production method (in groups). What is their impact? promote biodiversity.

EXPLORE 1: Networking: (1) Build a spaghetti tower, reflect on collaboration. (2) Case study + find an example in your country/sector.

EXPLORE 2: Awareness: Levels of development (incomes vs life expectancy) by country. Compare activities to understand any differences.

EXPLORE 3: Conscious and proactive action: Globingo game (global citizenship) + Find solutions to social injustice linked to CALL TO ACCTION: Design an awareness campaign on the SDGs. the SDGs.

END - Evaluation 1 Hour

KNOW: Quiz on Sustainability Makers, cut-and-paste activity on sustainability competences

6. LESSONS LEARNED TOGHETER



6.1. BELGIUM

Odisee

Odisee co-hogeschool campus Brussel (Brussels)

https://maps.app.goo.gl/8TpqsamagY5Y5fM36





How we involve school, educators and learners

Odisee's reason to work on the Stairway to SDG 3.0 project, has been the demand of its teachers. Both in the graduate and in the bachelor programmes, Odisee's teachers have raised the question how to include sustainability in their classes: they were already engaged in the topic. As such, we have presented the project as an answer to that question during a teammeeting of Odisee's teachers of the Business department. Of course, some teachers are more sustainability-minded than others, but that has not been an issue. In the work groups

where we brainstormed on the content on SDG's 7, 8, 9, 10 and 11, the teachers involved had a great interest in the topic. Some of them had a professional background in sustainability, some had not, but they were very engaged in the brainstorm sessions nonetheless. The only small hurdle to overcome was to find teachers who had the time and were willing to spend some time on these sessions on a voluntary basis, but after all it was worth the effort since they can now use the created output, which facilitates them in their teaching. The first sessions were organised face-to-face, but to encourage more teachers to partake in the sessions, we organised the next few sessions online.

The modules were a good starting point but we adapted the activity to the purpose of a single contained workshop.

Francesco, Belgium teacher





What we did in the pilot experience

Odisee's teachers found it rather easy to find relevant activities on the overview of the platform's activities. Depending on their course, they decided on implementing activities from a certain SDG. For example, one finance teacher chose one 'explore' activity of SDG 9 related to finance, and introduced the topic to her students by also going through the introduction module of SDG 9 first, spread over two separate courses. Another teacher, teaching about (ethical) marketing, chose to focus on an activity in SDG 8: students worked on the introduction as homework, and then worked on one of the 'explore' activities in groups during class. At the end of the class, each group presented their findings to the rest of the group. A third teacher also worked on SDG 8, but added the aspect of language. In his class, students could choose in which language they executed the 'explore' activity: either in the school's native language Dutch, or in English.

I created slides to guide the students through the module, because otherwise it was too complex. I had them complete the assignment. 2 weeks later, I asked them questions about what they had found. The students found it interesting.

Ellen, Belgium teacher







Tips for teachers

Overall, Odisee's teachers recommend to start from the overview of activities when you are interested in implementing SDG's in your course or study programme. Look for similar topics or topics that could easily be linked to what you are teaching about already. For example, if you teach about finances, there is an interesting activity on sustainable investments in the module on SDG 9, while a Concrete cases that make SDGs tangible and 'part of life' are crucial.

Dave, Belgium teacher

course on a topic such as biology or agriculture could more easily be linked to SDGs 14 and 15. Use the content of the Sustainability Makers platform as a "pick and mix" system: it is not mandatory to go through a whole SDG-specific module. As a teacher, you have the freedom and flexibility to choose which SDG(s) and which activity or activities you want to work on.

Odisee University of Applied Sciences is a leading higher education institution in Belgium, dedicated to preparing students for professional success in a rapidly changing world. Odisee offers support for teachers and trainers who are interested in integrating sustainability and the Sustainable Development Goals (SDGs) into their curriculum. Educators who are interested in using the Sustainability Makers platform and want more information, such as an info session or workshop for teachers, can contact Tineke Jacobs at tineke. *jacobs@odisee.be.*



1st Evening Vocational High School of Tavros (Tavros)

https://maps.app.goo.gl/KmGHuecBQU7QLFUdA





1st Vocational High School of Argiroupolis (Argiroupolis)

https://maps.app.goo.gl/dE36a3fHDorLYUi2A



#StairwaytoSDG

How we involve school, educators and learners

The Mediterranean Centre of Environment organised two open sessions to introduce teachers to the methodology and to the online platform for "Sustainability makers". Participants could test the Module on SDG13 - Climate change. With the support of the Handbook for trainers, they started thinking of the best way to use the learning material with their learners.

Great source of information.
Practical, easy to understand,
fun for everyone and very
useful!!!

Evelina Vassiliou, Greek teacher







What we did in the pilot experience

Twelve students from Class A (Economics) and Class B (Health) participated in three sessions dedicated to SDG 3: Good Health and Well-being. The sessions began with an introduction to the concept of sustainability and an overview of the 17 SDGs (Introductory module). Following the proposed learning path, the group completed a self-evaluation questionnaire on SDG3 and then delved into the "To Know" section. The students decided then to focus on mental health and well-being. They explored this topic through various activities provided in the "To Explore" section. Afterward, the school's psychologist was invited to support the "To Act" session, related to stress management. The purpose of this action was to create a communication network among the group members, share experiences related to stress management, and propose ideas to enhance the mental resilience of the entire school community.

Our students, primarily adults, benefited greatly from the comprehensive presentation of topics and the wealth of materials. They quickly learned to navigate the platform for their personal research. Our teaching approach closely adhered to the guidelines provided in the teacher's manual. Kyriaki Kefala, Greek teacher







Tips for teachers

Adaptation to learners: Most learners have little knowledge of the SDGs and varying levels of interest in "sustainability," but they all possess some environmental awareness that can be further developed. It is therefore important to adapt the use of the proposed educational content to match the interest and knowledge level of your audience. Regardless of this level, the key is to promote a sustainable approach to any issue, encompassing its environmental, social, and economic dimensions, and to encourage each individual, at their own level, to take responsibility for behavior change.

Session planning: Given the objective of behavior change, the implementation of the various sessions will take several weeks or even months, as it is necessary to give learners time to assimilate the information, organize themselves, and transform their behaviors.

I not only loved the game's implementation, but I also found it incredibly useful in the classroom for assessing the students engagement.

The students were enthusiastic, finding it both enjoyable and practical.

Giannis Kalakos, Greek teacher

Time management: Integrating new content and activities into existing schedules and curriculum can be a challenge for educators. For this reason, Sustainability Maker offers flexible planning options (online or offline) and adaptable content based on different practical abilities. Some activities can also be completed as homework by the learners.

Resource limitations: In some establishments, access to digital tools may be limited (Internet access, computers). In such cases, teachers can show on a screen online activities and mini-games for group work instead of individual work.

The Mediterranean Center of Environment offers support for teachers and trainers interested in engaging their students in learning about sustainability and the SDGs. With just one or two meetings, educators can become acquainted with the tools provided by Sustainabilitymakers and develop a program of activities customized to their teaching objectives and constraints. For more information, please contact: Isabelle Trinquelle, Project Manager: *itrinquelle@medcenv.orq*





ENAIP - Villazzano

(Trento)

https://maps.app.goo.gl/WxWWXiq97fgT6r3L7





#StairwaytoSDG

How we involve school, educators and learners

During the first semester of 2024, the School Council decided to use the Stairway to SDG 3.0 Project as a common platform for the entire institute for the 2024-25 school year. Some SDGs were coherently selected that could start from a general idea up to the local application of the ideas, from SDG 10 and 2 at a national level to 11 and 12 as a local application. 2024 sees the city of Trento as the European Capital of Volunteering 2024: it was decided to address the issues related to the SDGs and Volunteering in a coordinated way. All the teachers of the institute were involved as well as all the classes, in an overall project that sees the pilot project as something experimental to be able to refine the interaction between the Institute, teachers and students.

The activities carried out in parallel in several classes allowed the sharing of the experience even outside the single class.

Michela Bonfant, Italian teacher



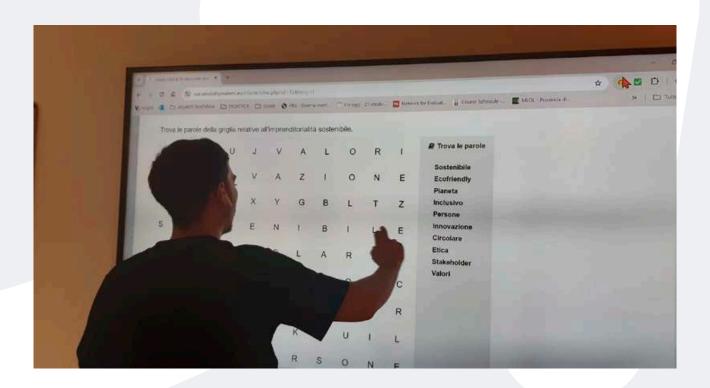


What we did in the pilot experience

To complete the pilot experience, it was decided to follow the path proposed by the Platform without introducing substantial changes. This was to have a common basis for discussion among teachers in view of the adoption at the Institute level. For organizational reasons, the final phase of the proposed path (Sustainability Challenge and 2D Game) had to be moved to September. The overall project was very successful among Students and Teachers.

Sometimes I needed the teacher to understand and use terms that were a bit difficult for me.

First-grade Italian student.



Tips for teachers

I had fun playing the 2D game while I was learning! Italian she student.

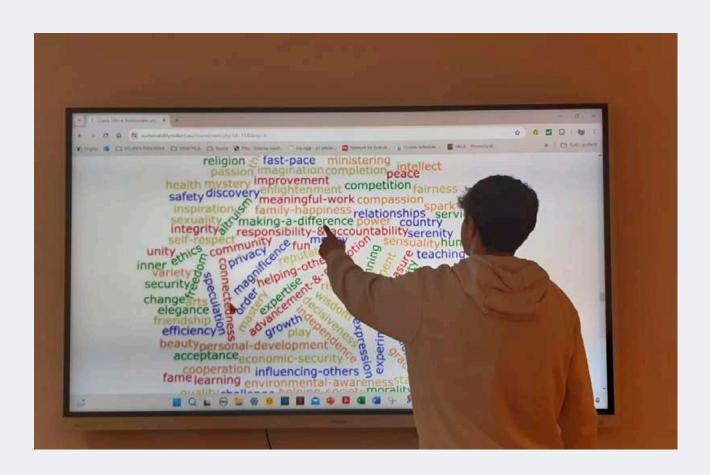
Sometimes navigating the content seemed a bit difficult. Student

Thank you for introducing me to problems that I didn't even imagine existed. The topic of Fast Fashion really struck me. A student

We should do more activities in the area related to the SDGs. A she student

The platform was useful to me as a teacher and to the students to gain in-depth knowledge of the social aspects and problems that the SDGs want to bring to our attention. Furthermore, the Platform was useful to me as an English teacher to be able to teach the foreign language using an innovative tool and channeling 'unexpected' themes during teaching hours.

Alessandra Bezzi, Italian teacher



It was very challenging to create a platform that could involve both students and teachers. I knew many aspects related to the SDGs but perhaps I didn't have the desire or the strength to fully understand their implications, it was a great journey! Alberto from Taranto *a.ditaranto@tyto.it* IT Manager



Agrupamento de Escolas de Santa Maria da Feira

(Santa Maria da Feira)

https://maps.app.goo.gl/QkbNhqNNSZfdHBKJA





#StairwayloSDG

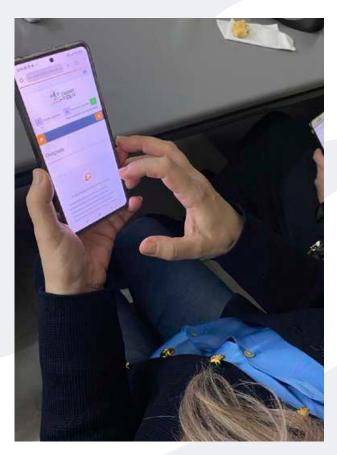
How we involve school, educators and learners

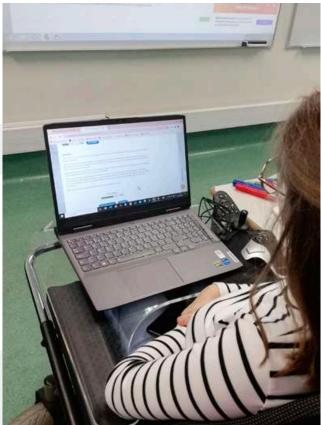
In January 2023, the school board was contacted to present the Stairway to SDG 3.0 project. The board invited four vocational teachers to accompany the project and be part of the working group. Between March and May 2023, three working group meetings were held to share some of the content to be developed and to gather suggestions for activities based on the teachers' experience and the students' knowledge for the Sustainability Makers platform. An activity planning meeting

The practical activities facilitated the students' participation and receptivity.

Manuela Azevedo, Portuguese teacher

was held in October 2023 and one of the teachers attended the transnational training in Romania in November 2023, which contributed significantly to her greater involvement and sense of belonging to the project. In February 2024, the teachers were contacted again to select the classes for the pilot and to introduce the platform and the 2D game.







What we did in the pilot experience

This pilot was implemented in a multimedia technician course with 20 students on SDG 16. We started with the 'Introduction' module, where students explored the SDGs and their relevance to their vocational course. Then we started working on the SDG 16 module. The 'Know' section consisted of exploring the resources on the platform to get to know some of the main related concepts. In the "Explore" section, students explored the SDG through practical activities such as group work and activities on the platform on different topics: bullying, positive

Apart from a few details, the platform is well designed and the information is simple and easy to understand.

Portuguese learner

communication and becoming an active subject. In the 'Act' section, they chose a topic related to injustice and worked on it by preparing a presentation for another class. This pilot ended with the 'Evaluation' module. The aim of this pilot project was to show that young people, as citizens and professionals, can make a difference in creating a more just and peaceful environment.







Tips for teachers

Before starting to explore the platform, an "agree/disagree" exercise was carried out with questions that had no obvious answers. For example: "My individual action has an impact on the achievement of sustainable development". This was an initial exercise that allowed us to get to know the students' opinions on the subject in a more relaxed way.

The 2D game can be used to introduce an SDG in a playful and educational way, allowing students to reflect on their existing knowledge of the topic and their attitudes and behaviours towards it.

A very interesting tool that meets the interests of the target group.

Maria dos Anjos Figueiredo and Liliana Monteiro, Portuguese teachers

The mini-games on the platform are a resource that students have appreciated. It is important that these exploratory activities on the platform are interspersed with other practical activities also offered on the platform - videos, group work, simulations, analysis of case studies, etc. All activities offered should be adapted to the vocational course and the profile of the students.

Try to make the most of the resources available that can reinforce a theme proposed on the platform. For example, in the "positive communication" activity, a psychologist was invited and she brought some practical exercises that were much appreciated by the students.

Rosto Solidário is an NGO for Development with experience in training for trainers and teachers in the field of sustainability. We are available to provide 3-6 hours training on the pedagogical approach and tools developed in the project. For more information, please contact the coordinator of Rosto Solidário, Paulo Costa, at the following email address: *geral@rostosolidario.pt*





Colegiul Național Elena Ghiba Birta (Arad)

https://maps.app.goo.gl/3FNbWmANJZ66Ci9r9





#StairwaytoSDG

How we involve school, educators and learners

Engaging teachers, students, and schools in the planning of the piloting was a wide process. We initiated our efforts by holding introductory meetings with school administrators and teachers, where we explained the project's objectives, benefits, and requirements.

We formed collaborative work groups that included teachers, students, and project team members. To ensure teachers were well-prepared for the pilot, we organized workshops, which provided them with the necessary knowledge. During the development phase, we involved teachers and students.

Throughout the pilot implementation, we maintained close support and monitoring, offering regular check-ins. Feedback

The 2D game and the call-to-action activities were very good. These activities could be used extensively during the two weeks dedicated to environmental protection and 'Scoala Altfel' in Romania.

Romanian teacher

loops were established, allowing teachers and students to continuously provide input. The pilot phase concluded with a thorough impact assessment, evaluating the educational effectiveness of our tools. This collaborative approach not only enhanced the quality and relevance of the content but also facilitated a smoother integration into the educational framework.









What we did in the pilot experience

During the pilot at Elena Ghiba-Birta National High School in Arad, we involved six teachers and twenty-one students over three sessions, focusing on SDGs 11, 13 and 15. The process started with an introduction to the platform, followed by an assessment to measure initial knowledge. In the "Know" phase, the interactive content on SDG 15 was well received. The 'Explore' phase included a 2D game, appreciated for its concept but considered too easy by the learners. The "Act" phase included action-prompting activities such as building bee hotels, which were highly appreciated.

Teachers and students highlighted issues with the enrollment and forum posting processes, finding them

We loved building the beehotels for the insects and were really interested in hearing more about them and how they actually help the insects. More outdoor activities like this would be great.

Romanian student

enrollment and forum posting processes, finding them overly complicated and time-consuming. Privacy concerns also arose over the requirement to upload personal pictures. Overall, while the platform's content and activities were praised, improvements in usability and more practical, outdoor activities were recommended to enhance engagement and educational impact.

Tips for teachers

Based on our pilot experience at Colegiul National Elena Ghiba-Birta Arad, here are some specific tips for teachers:

- -Ensure all students have access to emails that won't filter the platform's communications into spam. Double-check the enrollment steps and guide students through the process in class to minimize confusion.
- -If possible, pre-create student accounts to save time during the first session.
- Overall, the platform looks good. The teachers appreciated the course content, and students enjoyed the interactive and engaging materials provided.
- -Students found the puzzles within the courses very engaging. Incorporate these regularly to maintain interest and break up the content.
- -Plan outdoor activities, such as building beehotels or other environmental projects. These hands-on experiences were highly praised and provide practical learning opportunities.
- -Do not insist on uploading personal pictures. Respect teachers' and students' privacy preferences and find alternative ways to personalize profiles if necessary.



Predict CSD Consulting provides training and support for teachers and educational centers to collaborate effectively and integrate our e-learning platform into their curriculum. For more information, please contact Andrei Sălăjan at *andrei.salajan@predictconsulting.ro*







IES La Providencia

(Medina de Pomar - Burgos)

https://maps.app.goo.gl/fLWpaJYKshjX8Hcy6







How we involve school, educators and learners

By Amycos NGO we activated a huge work of promotion of the project with the VET schools since the beginning, talking with the directors of the city Burgos and its province, and those teachers who showed in old collaborations the willingness to change their way to teach including sustainability values. Throughout the project, we offered them to take part in an innovator and participatory process to train them on the approach and the contents of the platform. However, for the piloting phase we activated a training course of 20 hours aimed principally to VET teachers through the CFIE Burgos, a public institution which provides training to teachers, to explain our approach, our educational proposal and the contents and tool available on the platform. Also, we monitored and evaluated their experiences in class by scheduled online meetings with those teachers who finally decided to test our platform.

I have integrated the contents of the e-modules without any problem, as the students are very used to working with Moodle platforms and, therefore, it has been familiar to them and they have seen it as something natural Spanish teacher



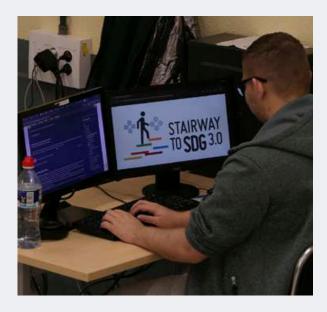


What we did in the pilot experience

In our pilot experience in IES La Providencia, a VET centre in Medina de Pomar, a small town in the North of Burgos province, we involved 3 teachers, who took part in all the previous phases of the project (including an international training in Romania), guaranteed consciousness about the aims. Together we decided to follow our educational proposal, respecting the different steps as much as possible and planning the experience in three months. The teachers decided to work on SDG11 from different perspectives by integrating our platform into their specific programme, marking the points of contact with the programme but

The platform has been of great help to me, it is transversal to the curricular contents and has been very well received by the students Spanish teacher

dedicating a specific space and time each week to carry out the piloting. Around 10 sessions were held per class including the Call to Action, which finally consisted of creating a Zero Emissions Mini Buggy involving students from the different cycles and courses (Vehicle Maintenance and Computer Systems). This work was presented to the municipality and a debate was activated in the community about what other actions would foster to sustainable living in the town.





Tips for teachers

Any change needs positive attitudes and willingness. Our teachers showed it during all the phases of the project keeping the compromise and the responsibility toward the people involved. Without that it's impossible to change anything. You need to trust that your work it's important and determinant for the new generations. It's necessary to

The game has been fantastic and very instructive
Spanish student

work in a team and support each other. You must knock the door of your colleagues and of the director of your VET centre asking support and explaining your ideas. You need good alliance if you want to try change the mindset of the people around you. Be flexible, the platform is a great tool, but you define the way to use it. Explore it deeply and after plan your action!!



Amycos is an NGO for the development, and it is very active in his community to promote a solidarity and sustainable values. We believe that the education is the key for every change, and we offer our experience in training for trainers and teachers in the field of sustainability.

We can provide a training with several sessions on the pedagogical approach and tools developed in the project. For more information, please contact the coordinator of the project, Alessandro Zuottolo, at the following email address: <code>europa@amycos.org</code>

Recommandations

Sustainability must be the key to driving change in the education system in most countries. The 17 SDGs have to be embedded into the core curriculum across various subjects to ensure students understand the interconnected nature of global challenges.

However, successfully integrating sustainability into education relies on effective training of trainers, so that they can be well-prepared to incorporate SDG-related challenges into their lessons and serve as an "inspiration" to students. This will enable them to encourage fellow educators to implement sustainability in their courses, highlighting that sustainability can be applied everywhere.

Sustaining these efforts involves embedding sustainability into school culture and strategic planning. School administrations must secure the necessary resources and continually update their frameworks to prioritize sustainability.

Partnership with businesses and organizations that prioritize sustainability will also add pedagogical value, providing real-world insights and internship opportunities for students.

We should not forget that people will only change their behaviour if they believe they can have an impact. Involving students in activities that promote sustainability encourages them to be "Sustainability Makers" in their own environments—at home, at school, and at work.

Interactive projects and hands-on experiences bridge theoretical knowledge with real-world applications. This step-by-step guidance should ensure the steps are small enough to be achievable, yet significant enough to make an impact!



www.sustainabilitymakers.eu



some tips about BLENDED LEARNING



the modern teacher needs to be succesful in connecting the bricks and clicks that blend together the online and the face to face classroom

ENGAGE WITH STUDENTS

Participate in polls, quizzes, games and interactive elements.

Don't send your classroom all over the Internet.



USE VIDE

Make personal videos to teach!! Students respond when these videos have their teacher's voice

CREATE 2-WAY COMMUNICATIONS

Establish habits of feedback, discussion, and conversation about learning between students and teachers



PROMOTE STUDENT PROFESSIONALISM

Teach students to use correct grammar, follow instructions, and engage in meaningful conversations about work.

USE A CONSISTENT LAYOUT

Use consistent graphics and layout elements_ on each of the pages in your online classroom.

KNOM where

Many other teachers and organizations are using e-learning tools. Feel free to

FOCUS ON CONTINUOUS IMPROVEMENT, NOT PERFECTION



to go for help

ask them to resolve your problems.



STRUCTURE FIRST

DESIGN SECOND

THIRD, TEST & CORRECT THEN USE IT



#StairwaytoSDG



7. REFERENCES

- → Beard, C. and Wilson, J.P. (eds) (2002) **The power of experiential learning: a handbook for trainers and educators.** Kogan Page: London.
- → Kolb, David A. (1984). **Experiential Learning. Experience as the source of learning and development.** Englewood Cliffs, N.J.: Prentice Hall cop.
- → Haleem A., M. Javaid M., Qadri M.A. (2022). **Understanding the role of digital technologies in education: A review.**
- → Hamari, J., Koivisto, J. A., & Sarsa, H. (2014). **Does gamification work? A literature review of empirical studies on gamification.**
- → Monroe, M. C. (2003). **Two avenues for encouraging conservation behaviors.** Human Ecology Review, 113-125.
- → Roosta, F., Taghiyareh, F., & Mosharraf, M. (2016). **Personalization of gamification elements in an e-learning environment based on learners' motivation.**
- → Smith-Sebasto, N. J., & D'Costa, A. (1995). **Designing a Likert-type scale to predict environmentally responsible behavior in undergraduate students: A multistep process.** The Journal of Environmental Education, 27(1), 14-20.
- → UNESCO (2017). **Education for Sustainable Development Goals: Learning Objectives.** United Nations Educational, Scientific and Cultural Organisation: Paris.
- → United Nations A/RES/70/1: Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015, 2/35.
- → Vargas-Macías Z.L., Rodríguez-Hernandez A.A., and Sánchez-Sáenz C.L.(2020). **Digital games (Gamification) in Learning and Training: An Approach to Adaptation and Integration in the Classroom.**
- → Wiek, A. et al. (2011). **Key competencies in sustainability: a reference framework for academic program development.** Sustain Sci, 2011 (6), 203-218.

OBJECTIVE MAIN

Boost sustainable development in VET with e-learning & gamification







ANCHORED in the 2030 AGENDA and the Sustainable Development Goals

MULTIDISCIPLINARY INTERDISCIPLINARY

APPROACH

TECHNOLOGICAL

to prepare & qualify
SUSTAINABILITY
MAKERS

Shaping the world we need with the

Education for Sustainable Development

7 ORGANISAT

from 6 countri

Belgium | Greece | Italy | Portugal |









14 professionals invo

117 VET TEACH

from 17 STUDY CEN involved in workground

6 Transnatio Meetings

4 face to face / 2 or

2 TRANSNATION TRAINING COL

44 participants in









AIRWAY 01-KA220-VET-000025741

1 E-LEARNING PLATFORM WWW.SUSTAINABILITYMAKERS.EU

2.446 Users registered

1.000 Unique visitors (from 01/10/2024 to 24/12/2024)

19 teaching modules

in 7 languages

EL EN ES IT NL PT RO

rions

ean Union

Romania | Spain

es

lved

by

HERS

JTERS

NAL

nline

DNAL

IRSES

total

20 TEACHERS

119 - 90

325 STUDENTS

186 under 18 yr. 139 over 18 yr.

Over 130 interactive exercises

1 GAME

55 activities

to do

in class

6 scenarios + introduction 1 Methodological Handbook

to maximise the potential of our tools and with helpful lessons learned together

20 Pilot Experiences

3 BEL | 6 ESP | 3 GRC 3 ITA | 2 PRT | 3 ROU

UTILITY OF TOOLS



Overall rating of teachers in each country

























