



Learning and Teaching Package 7

Sustainable Entrepreneurship Education

Overview of LTP 7

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Contents

Overview	2
Pedagogical Approach.....	3
Sustainable Entrepreneurship Education: Background information	3
Piloting of the materials within TAP-TS.....	3
ECTS Distribution	4
UNIT 1 Introduction “Sustainable entrepreneurship mindset”	5
UNIT 2 Self-reflection “Sustainable entrepreneurship mindset”	6
UNIT 3 Transfer “Sustainable entrepreneurship”	7
UNIT 4 Implementation “Sustainable Entrepreneurship”	8
UNIT 5 A JOURNEY INTO A MORE SUSTAINABLE CITY*	9



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Overview

LTP 7 follows a holistic approach by providing background information and methodologies to foster the sustainable entrepreneurship competences of in-service and pre-service teachers. Based on the knowledge, skills and competences acquired by completing this LTP, teachers will be able to develop new teaching materials or adapt already existing ones with aspects of sustainable entrepreneurship education (SEE).

Entrepreneurship education plays a key role in supporting young people to adopt a positive mindset. The entrepreneurial mindset is referred to a certain way of thinking by which young people confront difficulties and problems in life. The entrepreneurial mindset enables young people to overcome those challenges, be decisive and take on responsibilities for any of their behaviours and activities.

Unit 1 - Unit 4 are meant specifically for teacher education offering activities and materials to educate pre-service and in-service teachers around SEE. Unit 5 and Unit 5 Light provide materials, resources and contents for teachers to implement directly in their classrooms. Also, Unit 4 Further Examples could inspire teachers for SEE workshops.

Unit 1 Introduction to SEE provides knowledge-basis around entrepreneurship and sustainability competences supported by focusing questions. This unit aims to reflect on the level of the entrepreneurial mindset of the teachers in a creative and trustful atmosphere.

Unit 2 Self-Reflection engages with values and attitudes towards sustainability and entrepreneurship. This unit raises the awareness of the teachers for fostering their own sustainable and entrepreneurship competences. Through different reflective phases teachers get aware of their motivation to work with these topics and also with the possibilities of interdisciplinary linking the theory (GreenComp, EntreComp) with the practice (own living and teaching environment).

Unit 3 Transfer supports teachers by the transfer of their know-how, values, attitudes, and motivation into the teaching practice. The key focus is to get into action while elaborating ideas on how to connect the sustainable entrepreneurship approach with own teaching subject.

In **Unit 4 Implement** the participants develop their own teaching and learning materials by aligning the learning objectives of their subject(s) with the sustainable entrepreneurship competencies. Furthermore, the participants also elaborate hands on working materials for students and set the assessment methods and tools for the assessment of the learning outcomes. There are examples provided, based on the experiences from TAP-TS events, and CorEDU practice.

Unit 5 A Journey into a More Sustainable City (City of Future) is more practice-based, and would be of interest for student teachers and teachers to implement directly in the classroom. It aims to inspire to develop sustainable entrepreneurship competences among students in an engaging and fun way, while at

the same time giving knowledge-basis around key concepts. Students will set on a journey to improve their local surroundings by critically exploring what could be improved and how in their own cities or towns. There are two version provided. One is a more advanced version with the Lego Bricks and technology. Version Light offers alternatives but also engages with the projects in a creative way.

Pedagogical Approach

The pedagogical approach bases on the [TAP-TS Roadmap](#) and aims to enable learners and teachers to think and act sustainably. The elaborated five units within the 7 Learning and Teaching Package (LTP) “Sustainable Entrepreneurship Education” include methodologies and tools to foster the active participation of the pre-service and in-service teachers in the discourse on sustainability and follow a whole-school-approach when it comes to the transfer of the sustainable entrepreneurship approach into their own teaching. The five units furthermore follows a holistic approach while focusing on the competences defined in [the Green Comp Framework](#).

This LTP incorporates activities which are focusing on real life challenges (Unit 1), action-oriented, hands-on and action-oriented (Unit 2, Unit 3, Unit 5) activities, and stimulate creative collaboration between the teachers (Unit 4). Unit 5 also invites teachers and student teachers to try project-based approach following the following line:

1. Problem definition
2. Reflection
3. Business idea

At the end educators who have tried out the materials are invited to reflect on teacher practice at three levels and different dimensions (Follow-Up Activity2).

Sustainable Entrepreneurship Education: Background information

Sustainable entrepreneurship education teaches young people on the one side how to successfully use current resources to achieve sustainable growth while not risking future generations’ ability to access resources. On the other side sustainable entrepreneurship competences enable young people to value sustainability; to support equity and justice for current and future generations; to approach a sustainability problem from all sides, to formulate current and potential challenges in order to identify sustainable approaches to anticipating and preventing problems, and to mitigating and adapting already existing problems. Furthermore, to adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas and methods and to act for change in collaboration with others round up the sustainability competences.

Piloting of the materials within TAP-TS

This LTP was piloted within the online Workshop in 2023 and Unit 5 was tested as a face-to-face workshop in November 2023 in Dresden; and October 2024 in Pirna. The online workshop is available on the [TAP-TS Platform](#), and as text in [Appendix 1](#).



ECTS Distribution

UNITS	Hours	ECTS
UNIT 1. INTRODUCTION TO SEE	6	0,3
UNIT 2. SELF-REFLECTION	4	0,2
UNIT 3. TRANSFER	4	0,2
UNIT 4. IMPLEMENTATION (WITH PROJECT WORK)	10	0,5
UNIT 5. A JOURNEY INTO A MORE SUSTAINABLE CITY(*)	16	0,8
Total Value ECTS		2

*Taught plus personal learning follow-up



UNIT 1 Introduction “Sustainable entrepreneurship mindset”

Main Topic	Target Group	Duration	Knowledge Area/ Subjects in School	Activities	Suggestions for Possible assessment
Acquire knowledge about entrepreneurship and sustainability competences	Pre-service and in-service teachers in secondary schools	180 min	Applicable multidisciplinary across different subjects and knowledge areas	<p>Activity 1. Trends and Challenges</p> <p>Activity 2. Competence Frameworks</p> <p>Activity 3. Transfer</p> <p>Activity 4. Exchange</p>	Reflection questions
Intended Learning Outcomes	<p>Having worked through the activities and materials, students will be able to:</p> <ul style="list-style-type: none"> ✓ describe the core idea behind the GreenComp and EntreComp. ✓ list at least 5 competencies related to the GreenComp and EntreComp. ✓ elaborate first examples for the listed competencies in relation to the daily life. 				
Prior Competencies	optional/ideal: no prior competencies required				
Required materials	<ul style="list-style-type: none"> • Power Point with Information on the Entrepreneurship Competence Framework and Green Competence Framework • flipchart paper, moderation cards, pens 				
Cooperation/ Networking	Not applicable				
Practical Notes for Teachers	These materials are recommended for educators who are training pre-service and/or in-service teachers. As this unit aims to reflect the level of the entrepreneurial mindset of the teachers it is important to create a trustful and interactive learning atmosphere.				
Addressing GreenComp	Embodying sustainability values				
	x	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.		
	x	1.2 Supporting fairness	To support equity and justice for current and future generations and learn from previous generations for sustainability.		
	x	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.		
	Embracing complexity in sustainability				
	x	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.		
	x	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.		
	x	2.3 Problem framing	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.		
	Envisioning sustainable futures				
		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		
		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.		
	x	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.		



	Acting for sustainability	
	4.1 Political agency	To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.
	4.2 Collective action	To act for change in collaboration with others.
	4.3 Individual initiative	To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.

UNIT 2 Self-reflection “Sustainable entrepreneurship mindset”

Main Topic	Target Group	Duration	Knowledge Area/ Subjects in School	Activities	Suggestions for Possible assessment
Self-reflection on values and attitudes and find out the individual intrinsic motivation	Pre-service and in-service teachers in secondary schools	120 min	Applicable multidisciplinary across different subjects and knowledge areas	Activity 1. Self-reflection Activity 2. Awareness raising Activity 3. Matching Activity 4. Follow-up	Self-reflection sheet Personal ad for „walking gallery” An action plan for further self-growth
Intended Learning Outcomes	Having worked through the activities and materials, students will be able to: <ul style="list-style-type: none"> ✓ describe their own values and attitudes towards sustainability. ✓ describe their own values and attitudes towards entrepreneurship. ✓ demonstrate the intrinsic motivation for fostering their own sustainability and entrepreneurship competences 				
Prior Competencies	obligatory: Successful completion Uni 1 of this LTP optional/ideal: Experience with self-reflection tools				
Required materials	Self-reflection sheet, pen				
Cooperation/ Networking	Not applicable				
Practical Notes for Teachers	This unit raises the awareness of the teachers for fostering their own sustainable and entrepreneurship competences. Through different reflective phases teachers get aware of their motivation to work with these topics and also with the possibilities of interdisciplinary linking the theory (GreenComp, EntreComp) with the practice (own living and teaching environment).				
Addressing GreenComp	Embodying sustainability values				
	x	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.		
		1.2 Supporting fairness	To support equity and justice for current and future generations and learn from previous generations for sustainability.		
		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.		
	Embracing complexity in sustainability				
		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.		
	X	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.		
	x	2.3 Problem framing	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.		
Envisioning sustainable futures					



	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
	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.
	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.
	Acting for sustainability	
	4.1 Political agency	To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.
x	4.2 Collective action	To act for change in collaboration with others.
x	4.3 Individual initiative	To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.

UNIT 3 Transfer “Sustainable entrepreneurship”

Main Topic	Target Group	Duration	Knowledge Area/ Subjects in School	Activities	Possible assessment
First attempt to transfer theory into practice	Pre- and in-service teachers	120 min	Applicable multidisciplinary across different subjects and knowledge areas	Activity1. Brainstorming Activity2. Get into action Activity3. Elaborate learning outcomes Activity4. Follow-up	Reflective questions Presented learning outcomes
Intended Learning Outcomes	Having worked through the activities and materials, students will be able to: <ul style="list-style-type: none"> ✓ define what sustainable entrepreneurship is. ✓ elaborate the relationship between sustainable entrepreneurship and own teaching subject(s). ✓ formulate concrete learning objectives by considering own teaching subject(s) and the sustainable entrepreneurship competences. 				
Prior Competencies	obligatory: successful completion of Uni 1 and Unit 2 of this LTP optional/ideal: In case of non-attendance of Unit 1 and 2 the participant should be aware of their own values, motivation, needs.				
Required materials	Flipchart paper, pen				
Cooperation/ Networking	Not applicable				
Practical Notes for Teachers	This unit supports teachers by the transfer of their know-how, values, attitudes and motivation into the teaching practice. As examples that could support the formulation learning objectives, you can explore Appendix 1 Online Course, and Unit 5 of this LTP				
Addressing GreenComp	Embodying sustainability values				
	x	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.		
		1.2 Supporting fairness	To support equity and justice for current and future generations and learn from previous generations for sustainability.		
		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.		
	Embracing complexity in sustainability				
		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.		
		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.		



	2.3 Problem framing	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.
Envisioning sustainable futures		
x	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
x	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.
x	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.
Acting for sustainability		
	4.1 Political agency	To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.
x	4.2 Collective action	To act for change in collaboration with others.
x	4.3 Individual initiative	To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.

UNIT 4 Implementation “Sustainable Entrepreneurship”

Main Topic	Target Group	Duration	Knowledge Area/ Subjects in School	Activities	Possible assessment
Developing teaching and learning materials	Pre- and in-service teachers	360 min	Applicable multidisciplinary across different subjects and knowledge areas	In retrospect Development Feedback Follow-up	Ready teaching materials, assessment methods and tools
Intended Learning Outcomes	Having worked through the activities and materials, students will be able to: <ul style="list-style-type: none"> ✓ develop at least one teaching unit based on the learning objectives elaborated in Unit 3. ✓ develop related working materials for students. ✓ develop assessment tools for assessing the acquired competences of the students after implementing the teaching unit. 				
Prior Competencies	obligatory: Successfully completing Uni 1, 2 and Unit 3 of this LTP optional/ideal: In case of non-attendance of Unit 1, 2, 3 the participant should have elaborated learning objectives with the focus on own teaching subject(s) and				
Required materials	Flipchart paper, pen				
Cooperation/Networking	Not applicable				
Practical Notes for Teachers	In this unit the participants develop their own teaching unit by aligning the learning objectives of their subject(s) with the sustainable entrepreneurship competencies. Furthermore, the participants also elaborate hands on working materials for students and set the assessment methods and tools for the assessment of the learning outcomes.				
Addressing GreenComp	Embodying sustainability values				
	x	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.		
	x	1.2 Supporting fairness	To support equity and justice for current and future generations and learn from previous generations for sustainability.		
	x	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.		
	Embracing complexity in sustainability				
	x	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.		
x	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.			
x	2.3 Problem framing	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.			



Envisioning sustainable futures		
x	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
x	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.
x	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.
Acting for sustainability		
x	4.1 Political agency	To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.
x	4.2 Collective action	To act for change in collaboration with others.
x	4.3 Individual initiative	To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.

UNIT 5 A JOURNEY INTO A MORE SUSTAINABLE CITY*

Main Topic	Target Group	Duration	Knowledge Area/ Subjects in School	Activities	Suggestions for Possible assessment
The Unit engages students in developing their sustainable entrepreneurship competences through a fun project game.	Secondary school students	Min 500 min The activities can be played out as a one week project. There can be many adjustments made depending on contexts	Applicable multidisciplinary across different subjects and knowledge area	Start-Up Activity 1. The five-Minute Me/Bingo Development Activity 2. City of the Future/Gallery Walk Consolidation Activity 3. The Post-It Walk/My Sustainable City Activity 4. The Lego City/We Build a Sustainable City Activity 5. Sustainable Business/We are Problem-Solver Follow-Up Activity 1. Reflection on activities for students Activity2. Reflection on teacher practice	Project work
Intended Learning Outcomes	Having worked through the activities and materials, students will be able to: ✓ describe at least two entrepreneurship competences. ✓ differentiate among source of information.				

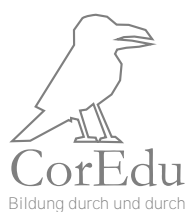


	<ul style="list-style-type: none"> ✓ describe challenges and potentials of sustainable cities. ✓ reflect the status quo of their own city considering principles of economic, ecological and economic sustainability. ✓ to transfer the observations on status quo from the city walk into a SWOT-Analysis. ✓ to elaborate first ideas for services or products for improvement of the status quo 		
Prior Competencies	optional/ideal: no prior competencies required		
Required materials	Post-it notes, pen, Lego-Kits (brought by students), tools for videorecording		
Cooperation/ Networking	Networking with colleagues teaching business would be recommended. Also, connecting to local sustainable businesses and asking them to be invited experts would enhance the experience.		
Practical Notes for Teachers	Timing depends on how deep you choose to go into each activity, on students' engagement. These can be adapted to your teaching contexts. This Unit can be seen as an example of activities for SEE.		
Addressing GreenComp	Embodying sustainability values		
	X	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.
		1.2 Supporting fairness	To support equity and justice for current and future generations and learn from previous generations for sustainability.
	X	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.
	Embracing complexity in sustainability		
		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.
	X	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.
	X	2.3 Problem framing	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.
	Envisioning sustainable futures		
		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
	X	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.
	X	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.
	Acting for sustainability		
		4.1 Political agency	To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.
	X	4.2 Collective action	To act for change in collaboration with others.
X	4.3 Individual initiative	To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.	

Project partners



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