



Learning and Teaching Package 7

Sustainable Entrepreneurship Education

UNIT 2: SELF-REFLECTION “SUSTAINABLE ENTREPRENEURSHIP MINDESET”

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Overview

The present Learning and Teaching Package 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.

The focus of Unit 1 is knowledge-basis around entrepreneurship and sustainability competences supported by focusing questions. Unit 1 materials are recommended for educators who are educating pre-service and/or in-service teachers. This unit aims to reflect on the level of the entrepreneurial mindset of the teachers in a creative and trustful atmosphere.

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

In Unit 4 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.

Unit 5 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.

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 four 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 who have tried out the materials 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 one module was tested as a face-to-face workshop in November 2023 in Dresden. The online workshop is available on the [TAP-TS Platform](#), and as text in [Appendix 1](#).



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: ✓ 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 DESCRIPTION

Start-Up

The key aim of the activity is to get a first overview about the participants' own values, norms and expectations on the entrepreneurship and sustainability.

**Estimated
Duration**

Activity 1. Self- reflection

The self-reflection sheet provides a systematic way to check own values, norms, expectations on the selected topics in a short way.

GreenComp Reference
1.1 Valuing Sustainability

Preparation for Activities: The self-reflection sheet can be prepared as online questionnaire or in a paper version.

Description



To systematically start the Self-Reflection (Worksheet in Handouts), each participant fills in the self-reflection sheet.





After filling in the self-reflection sheet the trainer asks for feedback and the participants share their answers in the plenum:

- Was it easy or difficult to fill in the self-reflection sheet? Why?
- How did you find the questions? (familiar or foreign?)
- Did you find out something new about your values, expectations or norms?
- Did you answer all questions or are there questions which are not answered? If yes, why?

30 min



Development		
<p><i>The key aim of the activity is - after getting a first overview about the participants' own values, norms and expectations on the entrepreneurship and sustainability – to reflect on it and identify their own available resources ("I am offering...") for sharing with other participants and define the need for growing ("I am requesting...").</i></p>		Estimated Duration
<p>Activity 2. Awareness raising</p> <p>The focus of this activity is on making the participants aware of their own values, norms and expectations while they are presenting those to the other participants and identify needs for competency gain.</p> <p>GreenComp Reference 1.1 Valuing Sustainability</p>	<p>Preparation for Activities: You will need Worksheet for Self-Reflection Sheet from the previous Activity</p> <p>Description:</p> <p> After giving feedback in the plenum, the participants continue their work individually.</p> <p> By considering the own findings in the Self-Reflection Sheet the participants create an advertisement with following components:</p> <ul style="list-style-type: none"> - Description of the person (teacher profile) - I am offering... (Which knowledge, skills, competences, experiences would you like to share?) - I am requesting... (Which knowledge, skills, competences, experiences are you looking for?) 	20 min



Consolidation

The key aim of the activity is to bring the participants together based on their needs, interests and resources and benefit from each other.

Estimated
Duration

Activity 3. Matching

The focus of this activity is on matching the offers and needs of the participants and benefit from each other.

GreenComp Reference

1.2 Valuing Sustainability

2.3 Problem Framing
(around one's competences)

4.2 Collective Action

4.3 Individual Initiative

Preparation for Activities: The “gallery of expertise” can be both, online (Miro Board) or offline (using papers which are pin on the wall).

Description



After preparing the own advertisement each participant shortly presents their ad and finally pin it on the wall.



The ads create a kind of “gallery of expertise” where the participants walk through and **try to match the offers and requests.**





After 30 minute “walk & exchange” the trainer asks the following questions in the plenum:

- Did you find somebody who needs your competences? Please explain.
- Did you find somebody who meets your need(s)? Please explain.

40 min



Follow-Up

Follow-Up		Estimated Duration
<i>The key aim of this activity is to create an action plan for possible activities after the workshop.</i>		
Activity 4 Follow-up The focus of this activity is to create an action plan in pairs with objectives to foster the personal growth of the participants after the workshop. GreenComp Reference 2.2 Critical Thinking	Preparation for Activities: No special preparation of this activity is needed.	30 min
	Description  Ideally, those participants who matched, meet after the workshop, and perform further exchange independently on how both can benefit from each other competences. In case there is no further match between the participants during the workshop, the findings of the “gallery of expertise” related to “I am requesting...” should be used as fundament for targeted further training (=professional development) in the particular institution of the participants. For this an action plan should be elaborated among those participants.  The action plan should at least include following information: <ul style="list-style-type: none"> - Which concrete knowledge, skills, competences and/or experiences should be fostered within the professional development of the participant? - Check the possibilities in which way your home institution can support you by finding appropriate offers for your needs? - Who are the responsible persons you need to talk to? - With whom you want to network outside of your institution to reach your aims? - What is the deadline to gather all these above-mentioned information? 	



Glossary

Learning outcomes – are statements of what an individual should know, understand and/or be able to do at the end of a learning process, which are defined in terms of knowledge, skills and responsibility and autonomy.

Cedefop: [Learning outcomes](#).

Sustainability - means prioritising the needs of all life forms and of the planet by ensuring that human activity does not exceed planetary boundaries.

GreenComp: [Green Competence Framework](#)

Entrepreneurship - is the capacity to act upon opportunities and ideas, and transform them into value for others. The value that is created can be financial, cultural or social.

EntreComp: [Entrepreneurship Competence Framework](#)

GreenComp - comprises four interrelated competence areas: 'embodying sustainability values', 'embracing complexity in sustainability', 'envisioning sustainable futures' and 'acting for sustainability'. Each area comprises three competences that are interlinked and equally important. GreenComp is designed to be a non-prescriptive reference for learning schemes fostering sustainability as a competence.

GreenComp: [Green Competence Framework](#)

EntreComp - is the European Entrepreneurship Competence Framework for people interested in learning, teaching and fostering the knowledge, skills and attitudes that make up an entrepreneurial mindset.

EntreComp: [Entrepreneurship Competence Framework](#)



Glossary of Icons



- Video



- Quiz



- Worksheets



- Editable Worksheets



- Various Media, e.g. Learning Apps



- Text to Read, or engage in active listening to others



- A question to Respond or a Question for Reflection



- A Discussion



- A task for an inquiry or search



- Focusing Activity



- A Reflection Activity



- An Activity for Action



- Suggested answers



- a short note for a teacher



- a group exchange



Worksheets and Links

Start-Up

EntreComp Framework - <https://ec.europa.eu/social/main.jsp?catId=1317&langId=en>

GreenComp Framework in different languages -

<https://publications.jrc.ec.europa.eu/repository/handle/JRC128040>

Activity 1. Self-Reflection



Worksheet Self-Reflection Sheet

Appendix

Appendix 1 Online course concept

The online course is a one-week asynchronous course with a workload of about 1 hour per day. The concept bases on the above presented LTP. The content, the duration and the methodologies and tools have been adapted to the online format.

Overarching understanding goals

Over this one week you will:

- explore best practices and strategies for teaching sustainable entrepreneurship.
- engage with one another to spark innovative thinking and develop practical ideas for implementation.
- apply ideas to your work by creating a usable product, such as a facilitation guide, or lesson plan.

Structure

This course is designed to offer overarching frameworks and ways of thinking, along with curated resources, that you then can apply to your own context. More specifically, this week you will find the following components:

- an overview and specific learning objectives of each module.
- a presentation of the course content (frameworks, models, etc.).
- one discussion to collaboratively process the content of the course.
- opportunities to give and receive peer feedback.

During the one-week course there is **one** live session at the end of the course. You are welcome to engage with the material at your own place. In order to reach the set learning objectives we recommend to complete the tasks day by day. However, if your learning style is different from this recommendation, please feel free to arrange your learning individually according to your needs and possibilities.

Unit 1 Entrepreneurship in Education

Learning objectives:

At the end of this course module you will be able to:

- describe the core idea behind the entrepreneurship education.
- list at least five competences related to the entrepreneurship education.
- to elaborate one practical example (case) with the reference to your own working field.

Unit 1.1 What is entrepreneurship education?

In the following module there are 16 learning videos available for you. It seems to be a lot, we agree! But each video lasts only for 2 - 3 Minutes and the speakers are very nice people. As the videos focus on the audio content, you can instead of watching too, only listen to them, for example by driving your car, sitting in the public transportation or by doing your weekly shopping. As the videos are practice oriented, we are sure you will enjoy it.

The following 15 videos give you a deeper insight into the particular entrepreneurship competences.



You can start with any of the videos as all of the videos are standing alone videos.

Please remember: After watching all videos please reflect on your learnings and post your answers in the forum. Thank you.

Additional task: If you are interested in an additional task to strengthen your learning outcomes, please feel free to read our "Case study Inedible canteen food". The case study is available at the end of the course in a pdf document.

Unit 1.2 Case study "Inedible canteen food"

Dear Participants, if you are still motivated and interested in our course (we hope so 😊) we would like to provide you an additional task to deepen your expertise in the implementation of the Entrepreneurship Education in the practice. The [Case study „Inedible canteen food“](#) provides you an opportunity to apply your knowledge, skills and attitudes gained in this course on *Entrepreneurship Education* in practice.

How to work on this case?

1. Please read the case carefully.
2. Please follow the instructions in the document to start working on the case.
3. In this document YOUR perspective, ideas and visions are asked. In this way you have the chance to test the case by you, before you involve your students in this case.
4. Please feel free to fill in the document and send it to us, if you wish feedback from us. We would be glad to reflect together with you on your work.

If you have any question, please feel free to contact us.

nota bene: We also provide you a filled in document with some ideas (Document: [Solution approaches](#)). But please, only check this document after your tasks are done as it may impact your initial ideas.

Unit 2 Sustainability and Entrepreneurship Education

Dear Participant, after finishing your case study you are ready for our second module. In this module we will work on the topic "**Sustainable** Entrepreneurship Education.

Let's have a look together on the two terms "sustainability" and "entrepreneurship" and let's elaborate the synergies for the education.

[Which competence are targeted when we speak about sustainability?](#)

[Education for Sustainability](#)

[Sustainable meats Entrepreneurship Education](#)

Unit 2.1 Case study "Sustainable canteen food"

Dear Participants, we would like to provide you a second case study which foster your expertise in the implementation of the approaches on the Sustainable Entrepreneurship Education in the practice. The case study „Sustainable canteen food“ provides you an opportunity to apply your knowledge, skills and attitudes gained in this course on Sustainable *Entrepreneurship Education* in practice.

[What does sustainable food means?](#)

[The case](#)

[Case study solution approaches](#)



Unit 3 SEE in light of the “Whole school approach”

The two case studies in the previous chapters are good examples for showing options, how different approaches on Sustainable Entrepreneurship Education can be covered within the school curriculum. These kind of approaches can be embedded in small project related activities, depending on your resources and possibilities in your schools and organisations. But the topic on Sustainable Entrepreneurship Education can also be covered holistically based on the "Whole School Approach".

[SEE in light of the “Whole school approach”](#)

Unit 3.1 Implementation of Whole School Approach in project based work on SEE

In this module we will show you some ways for elaborating ideas for the project related work on "Sustainable Entrepreneurship Education" in your school or organizations.

[The whole school approach in the practice](#)

[The five step investigation plan](#)

[The five step investigation plan in practice](#)

[Case study Whole School Approach with SEE template](#)

Dear Participant, it's your turn. Please find attached the template for your work. You can use this template immediately in your classroom with students. But please feel free too, to work on this template first by you own and make first experiences without involving students in this work. You can send us your filled in template if you wish feedback from us. Thank you!

Unit 4 Recommendations for the implementation of SEE projects

Dear Participant, congratulations! You finished the pilot course on "Sustainable Entrepreneurship Education (SEE)". In the following document you will find some recommendations on how to develop a SEE-Project by focusing on the EntreComp and GreenComp framework. Thank you for your participation and support!

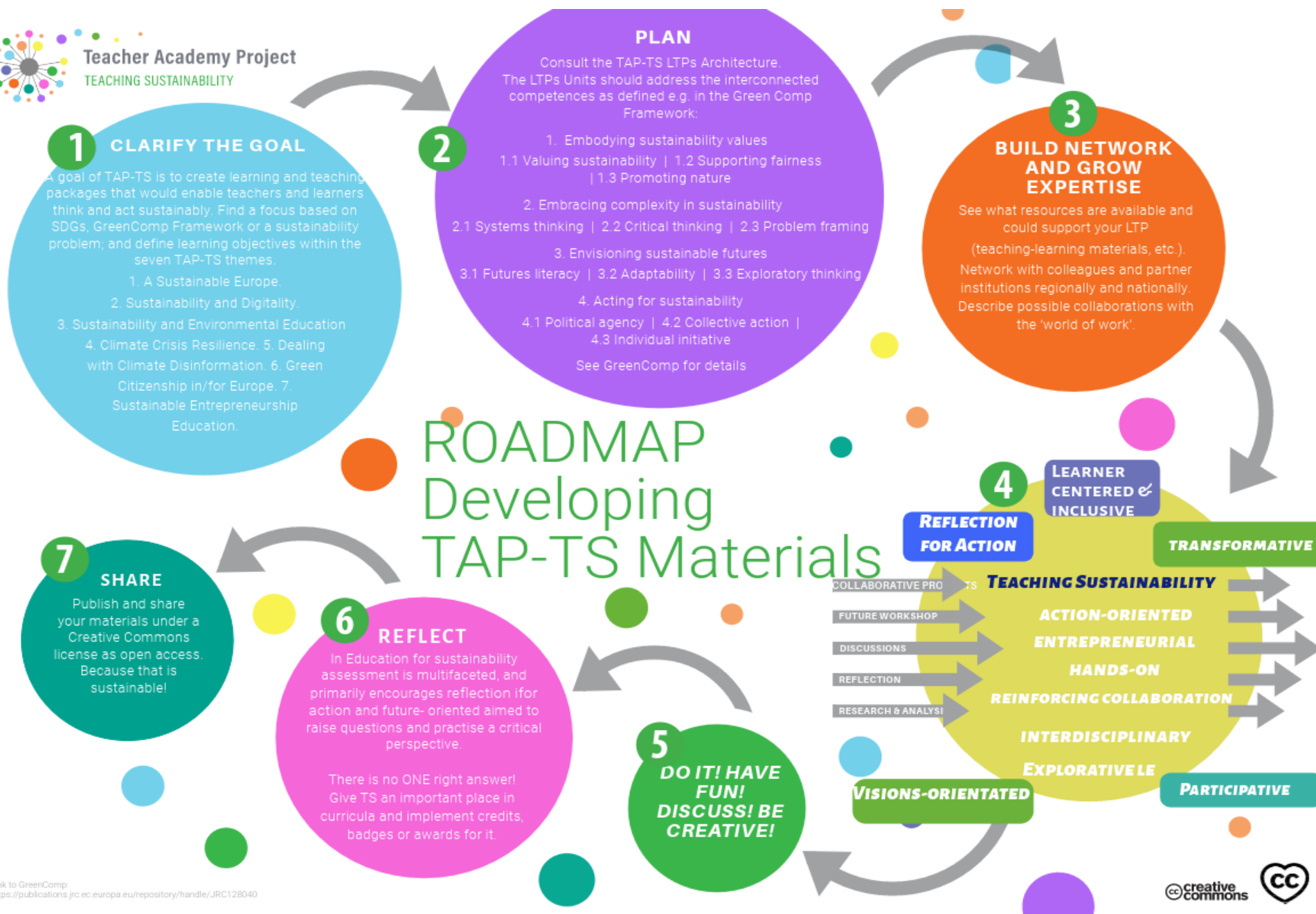
[Recommendations for the implementation of SEE project in your institution](#)

Appendix 2 TAP-TS Roadmap

TAP-TS Roadmap has three main goals: (1) for the TAP-TS partners as a roadmap to design LTPs; (2) for teachers and student teachers to design materials for teaching sustainability; (3) evaluation of LTPs. Explore the visualisation on the next page.

TAP-TS Roadmap: the Steps / stages in the TAP-TS LTPs Design Journey

1: Clarify the Goal	Our overarching goal is to enable learners and teachers to think and act sustainably. To actively participate in the discourse on sustainability, the topics must also be addressed - sustainably - in schools and universities. The goal of TAP-TS is to create learning and teaching packages for this purpose in the following areas: 2.1 A Sustainable Europe. 2.2 Sustainability and Digitality. 2.3. Sustainability and Environmental Education. 2.4 Climate Crisis Resilience. 2.5 Dealing with Climate Disinformation. 2.6 Green Citizenship in/for Europe. 2.7 Sustainable Entrepreneurship Education.
2: Competency Areas	The LTPs should be aligned with the interconnected four competences defined in the Green Comp Framework: • Embodying sustainability values • Embracing complexity in sustainability • Envisioning sustainable futures • Acting for sustainability
3: Networking & Bundle Expertise	There are many exciting topics. 1. Find a focus: what driving question is at the centre of your LTP. 2. See what resources are available (competencies, teaching-learning materials, etc.). 3. Network with colleagues and partner institutions regionally and nationally.
4: Working through the design process	Teaching Sustainability should be: action-oriented learning; hands-on; focussing on real life challenges; stimulate creative collaboration between teachers and learners; visions-oriented; participatory and action oriented . Approaches to teaching sustainability may be inquiry-based learning; explorative learning; networked learning; participation learning aimed at problem framing. Teaching Sustainability may incorporate the following activities: collaborative projects, future framing workshops, research and analysis, discussion.
5: ASSESSMENT DESIGN	In Education for Sustainability assessment can be multifaceted and primarily encourage reflection and be evidence based. There is not always ONE right answer. The goal should be to RAISE QUESTIONS. TS is not about teaching the „right“ behaviour, but about practising a critical perspective. Give TS an important place in curricula and implement credits, badges, or awards for it.
6: PUBLISH TO TAP-TS PLATFORM	Can you and where can you publish your materials under a Creative Commons license as free as possible. Because that is sustainable!





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