



Findings from piloting the SEE approach at CorEdu

The approach

The Unit 4 of the LTP7 Sustainable Entrepreneurship Education focuses on the development of teaching units and related working materials for students as well as on the elaboration of assessment tools for assessing the acquired competences of the students after implementing the teaching unit.

After carrying out the Active Learning Event 3 in Dresden as well the Online Workshops in 2023 and 2024 the feedback from the participants underlined the relevance of rethinking following aspects of the developed concepts and tools across all units:

- The concepts and tools provided within LTP7 should be easily adaptable to different subjects.
- The use of **LEGO®** bricks to build sustainable cities requires high acquisition costs for schools. Therefore, other additional options to work in a creative way taking into consideration the sustainability and entrepreneurship aspects should be provided.
- Further innovative approaches on the sustainable entrepreneurship education should be elaborated.
- Reducing the complexity of the two frameworks (EntreComp and Green Comp) through pragmatic solutions.

As a result, the CorEdu-Team elaborated new concepts based on the Project-Based-Learning-Approach as this approach delivered some common ground with the principles of the sustainable entrepreneurship education as follows:

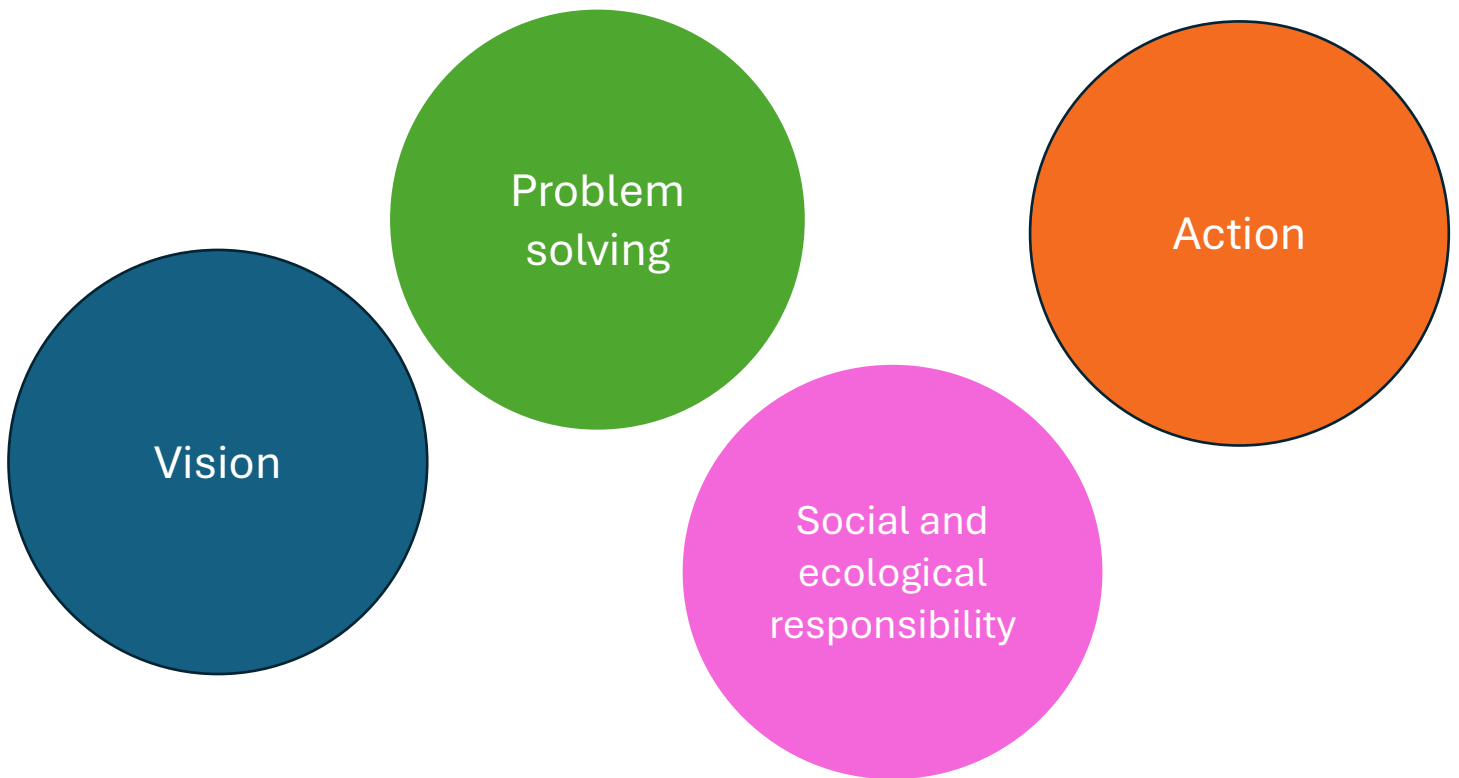
Sustainable entrepreneurship competences refer to a set of skills, knowledge, and attitudes **that enable entrepreneurs to create and manage businesses that are not only economically viable but also socially and environmentally responsible.**

These competences help entrepreneurs **integrate sustainability into their business strategies, decision-making processes, and operations**, aiming to balance economic growth with positive social impact and reduced environmental

Project-Based Learning (PBL) is an educational approach in which students actively explore real-world problems and challenges.

Students engage in complex, meaningful projects that require **critical thinking, problem-solving, collaboration, and various forms of communication.** Rather than passively receiving information, students learn by doing, gaining a

In order to respond to the participants' comments on reducing the complexity of the two frameworks, we orientated ourselves on the following principles, which are directly or indirectly inherent in both frameworks.



The workshop concept elaborated after the feedbacks of the participants follows the same structure as follows:

1. Problem definition
Input presentation by the teacher OR
Internet research task for the students
2. Reflection
Mood board (pictures, photos)
Short presentation
3. Business idea
Brainstorming in groups
Use of the Business Canva template

The three following implementation examples clearly demonstrate the adaptability of the concept to different areas based (wood, textile, food)

Concepts, tools, activities carried out

Workshop 1: There are no problems, only solutions - Plastic-free into the future



Problem definition

Plastic pollution harms wildlife, contaminates ecosystems, and contributes to climate change due to its production and disposal processes. It can take hundreds of years to decompose, leading to long-term pollution in oceans and landfills. Reducing plastic use helps conserve natural resources, decrease greenhouse gas emissions, and create a healthier, more sustainable planet for future generations.

Reflexion:

How does the issue of plastic affect your life?

What could a life without plastic look like? What alternatives are there for plastic items in our everyday professional and private lives?

Business idea:

How can reduce plastic in our everyday life/in school? (either a product or a service)

Photo documentation of the workshops: self-made stools, tables and shelves to replace the plastic versions in the students' own home



Workshop 2: Too fast (fashion) to be environment friendly



Problem definition:

Fast fashion is harmful to the environment because it promotes the rapid production of cheap clothing, leading to excessive resource use, high carbon emissions, and significant waste. The industry relies on toxic dyes and chemicals, polluting water sources, and encourages a throwaway culture, resulting in massive textile waste in landfills.

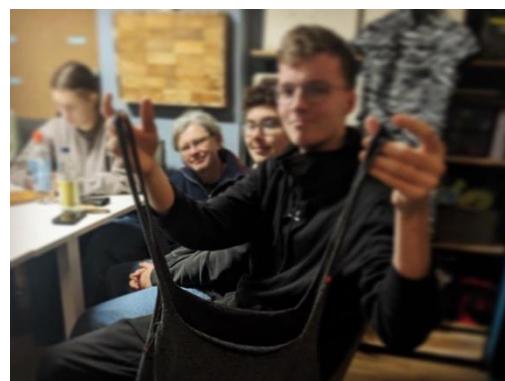
Reflexion:

What does fast fashion mean to you, and how does it differ from sustainable fashion? In what ways do you think fast fashion contributes to environmental degradation? What happens to clothes that are discarded?

Business idea:

How can we counteract fast fashion?

Photo documentation of the workshops: self-production/conversion of discarded clothing into wearable new garments, development of a business plan for a green fashion label



Workshop 3 No hunger - healthy and sustainable nutrition



Problem definition:

World hunger is a pressing global issue affecting millions of people, often rooted in poverty, conflict, and inequality. Its relationship with environmental problems is significant; agricultural practices necessary for food production can lead to deforestation, soil degradation, and loss of biodiversity. Climate change exacerbates these issues by affecting crop yields and increasing the frequency of extreme weather events, further jeopardizing food security.

Reflexion:

What are the main causes of world hunger, and how do you think these causes are interconnected with environmental problems? How can unsustainable water use in agriculture lead to both environmental problems and increased hunger?

Business idea:

What actions can you take in your own life to contribute to solutions for world hunger and environmental sustainability?

Photo documentation of the workshops: student catering service for school events, development of a business plan for a school firm providing catering for school events.





Acquired competences (valid for all 3 workshops):

- + Building knowledge with an open-minded approach
- + integrating new perspectives
- + gaining insights and taking action in an interdisciplinary manner
- + being able to identify and assess risks, dangers, and uncertainties
- + reflecting on one's own guiding principles as well as those of others
- + analytical and critical thinking
- + ethical behaviour
- + thinking holistically
- + developing visions for the future
- + creativity, motivation, individual initiative or collective action/working in teams

Lessons learned (summary):

- After the students finished their products, we asked them to set the price for their product (selling price). They calculated the price based on the number of hours they needed to create the product (btw. 6-7 h for both products made from wood and textile) and the current minimum hourly wage in Germany (around 13 €/h). By doing so they realised that the price especially in case of clothes would very high: 60-70 €/T-shirt. They also compare it with the prices they pay for their T-shirt for example by Primark or H&M. This exercise has raised their awareness of purchasing behaviour and the problem of pricing cheap products, fair pay, transparent production chain, etc..
- Students enjoyed the work by creating their products from wood and textile but in the same time we as teacher realised that that basic manual skills (sewing, hammering, calculating measurements) were not available.
- These workshops additionally fostered the digital competences of the students when it comes to searching information for the part "problem definition". Furthermore, we paid also attention on the credibility of the information searched or on copyrights on product design.



SEE in the classroom teaching, integrated in the regular teaching plan

This teaching module was integrated into the regular subject 'Job Application' in the partnering secondary school. The aim was the promotion of sustainable entrepreneurship competence based on the case study "Set-up a Green Fashion Company".

Description of the teaching module:

As part of the career guidance lesson, sustainable entrepreneurial skills were promoted in order to show pupils options for different training occupations and forms of employment.

Part 1: An introduction

The workshop provides an introduction to the topic of sustainability and works with the participants to develop the points of reference for their own professional and private lives.

Skills development: Building up knowledge in an open-minded way and integrating new perspectives, gaining and acting on interdisciplinary insights, recognising and weighing up risks, dangers and uncertainties, being able to reflect on one's own guiding principles and those of others.

Part 2: A self-analysis

Competence analysis - What can I do very well? What am I not so good at? What are my interests? Where do I want to go in the future? What are the challenges and opportunities?

Skills development: analytical and critical thinking, thinking in contexts, reflecting, changing perspectives, developing visions for the future.

Part 3: Practical workshop

Participants develop a business model for a green fashion label.



Photo documentation of the workshops: self-production of a mobile phone cover as the main product of the fictitious label founded by the students. Solving case studies as a company unit 'Procurement and Production', 'Executive Floor', 'Marketing'



Appendix:

Appendix 1 Case study worksheet "Procurement and production"

Appendix 2 Competence matrix Start-up of fashion label _mobile phone case – Self-evaluation sheet_Procurement and production

Appendix 3 Case study worksheet "Executive management"

Appendix 4 Competence matrix Start-up of fashion label _mobile phone case – Self-evaluation sheet_Executive management

Appendix 5_ Case study worksheet "Marketing"

Appendix 6: Competence matrix Start-up of fashion label _mobile phone case – Self-evaluation sheet_Marketing



Appendix 1: Case study worksheet “Procurement and production”

Imagine, you have been able to sell your mobile phone cases for good money. Due to the high demand for more mobile phone cases, you have decided to set up a company and produce them in large quantities.

Think about it together:

1. what do you need for a production hall? Please list all the items needed to produce the mobile phone case.

We need:

.....
.....

2. what does 1 bag cost to produce?

- a. Material costs for 1 meter of leather in euros:
- b. Labour costs per person:
- c. Number of employees in production:
- d. Rent for the production hall per month:
- e. Transport costs:

1 bag costs in production: EURO.

You have a large order for 500 mobile phone cases. Work out how much money you need to produce 500 bags.

For the production of 500 bags, we need EURO.

3. How much profit do you make per bag?

Profit = turnover - costs

We make EURO profit per bag.

4. You have to reinvest 30% of the profit every year. Think about how you will reinvest the money in 2025.



Appendix 2: Competence matrix Start-up of fashion label _mobile phone case –
Self-evaluation sheet

Procurement and production

1 -very good 2 – good 3 – not so good

| Competences | 1 | 2 | 3 |
|---|---|---|---|
| I can describe the individual stages of mobile phone case production. | | | |
| I can name the components of a production hall. | | | |
| I can calculate the costs of producing a mobile phone case. | | | |
| I can calculate the profit per mobile phone case. | | | |
| I can develop ideas for reinvesting the profit. | | | |
| I am a team player. | | | |
| I can put my ideas into practice. | | | |
| I can achieve my goals in the given time. | | | |
| I can motivate my colleagues. | | | |
| I can take different opinions into account when making decisions. | | | |
| I can present my ideas. | | | |
| I am motivated. | | | |
| I can research information on the Internet. | | | |



Appendix 3: Case study worksheet "Executive management"

You produce your mobile phone cases in China. Unfortunately, the employees in the factory are very unhappy with the conditions you are paying them.

They want:

- a) More money for their work
- b) More holiday days per year
- c) More profit sharing

You have made a turnover of EUR 1,000,000 per year with the sale of mobile phone cases. Of this:

- 30% to cover production costs:
- 10% for marketing:
- 20% taxes to the tax office:
- 20% must be reinvested each year:

20% remains. Normally, this 20% goes to the executives and their own employees for bonuses. The Chinese know this and also want more money.

How do you solve this problem?

Develop ideas on how to satisfy all parties (executives, employees in Germany, producers in China).

BUT:

1. if the employees in Germany get less bonus than last year, they are very unhappy and will quit their job.
2. if the bosses don't get a bonus, they will no longer be motivated and will only work part-time. But part-time is not enough to complete all the tasks.
3. if the Chinese don't get more money, they will stop production and will no longer produce for Germany.

Our suggestions are (please fill in):



Appendix 4: Competence matrix Start-up of fashion label _mobile phone case – Self-evaluation sheet

Executive management

1 -very good 2 – good 3 – not so good

| Competence | 1 | 2 | 3 |
|--|---|---|---|
| I can find solutions to existing problems. | | | |
| I can mediate between different interests. | | | |
| I can understand complex problems. | | | |
| I can deal with challenges. | | | |
| I can name the effects of my actions/decisions. | | | |
| I can represent my position in a team. | | | |
| I am a team player. | | | |
| I can respond to the wishes and ideas of other team members. | | | |
| I am motivated. | | | |
| I am creative. | | | |
| I am a good presenter. | | | |
| I can achieve my work results in the set time. | | | |
| I can research information on the Internet. | | | |



Appendix 5_ Case study worksheet "Marketing"

Brand name:

Logo:

Corporate identity colour(s):

Target group:

Tasks:

1. give your company a name.
2. create a logo for your company
3. determine the colours for the corporate identity
4. design an advertising poster for the sale of your mobile phone cases
5. present the results to the class.



Appendix 6: Competence matrix Start-up of fashion label _mobile phone case –
Self-evaluation sheet

Marketing

1 -very good 2 – good 3 – not so good

| Competence | 1 | 2 | 3 |
|--|---|---|---|
| I can design a visually attractive logo. | | | |
| I can explain why a corporate identity is important for the company. | | | |
| I can describe the target group of our product. | | | |
| I can put our idea for the promotional poster into practice. | | | |
| I can structure the information on the advertising poster well. | | | |
| I can name at least 3 features that make a good promotional poster. | | | |
| I can work well in a team/I am a team player. | | | |
| I can respond to the wishes and ideas of other team members. | | | |
| I can draw well. | | | |
| I am creative. | | | |
| I can present well. | | | |
| I can achieve my work results in the set time. | | | |
| I can research information on the Internet. | | | |