BLENDED LEARNING COURSE

Co-funded by the Erasmus+ Programme of the European Union

AGRIPOL

Sustainability in Vocational Education

IMPRINT

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INTRODUCTION

The Erasmus+ funded project Agricultural Policy and Sustainability in Vocational Education and Training (AGRIPOL) aims to implement the UN Sustainable Development Goals in vocational schools. By designing a blended learning course, the project contributes to addressing issues such as sustainability and agricultural policy as a subject of teaching. The cooperation of organizations from the four EU countries Germany, Austria, Poland and Bulgaria opens up different perspectives on the effects of the newly adopted Common Agricultural Policy (CAP) in 2021, which are processed in suitable teaching materials. This, together with the films and video clips created in the project, is freely available for use in the classroom and will be distributed to teachers throughout the European Union.

About this document

This document has been put together by a consortium of partners from Germany, Bulgaria, Austria and Poland as part of a project - Agricultural Policy and Sustainability in Vocational Education (AGRIPOL) – within the framework of a co-funded Erasmus+ programme of the European Union. The content is prepared to be a source of reference for vocational schoolteachers, educators, instructors, and trainers as well as provide a broader context on the link between food consumption, its impact on the environment, and the EU's Common Agricultural Policy (CAP). The materials provided herein offer teachers/instructors a hands-on information pool highlighting topics including sustainability, the history of the CAP, the two pillars of the CAP, the central stakeholders in the CAP, and sustainable nutrition. This resource material is free for use and may be incorporated into lesson plans and classroom activities.

1. BLENDED LEARNING COURSE

Context

"If we do not keep temperature increase below 1.5 degrees, we risk heading towards extinction later this century." One might assume that this statement was made by an environmental organization. But it is an EU body which came to this conclusion, published in ''Challenges and choices for Europe. Global Trends to 2030' by the inter-institutional EU project 'European Strategy and Policy Analysis System' (ESPAS). The authors also state: "In part, climate change is driven by what we eat: 14.5% of greenhouse gas emissions result from livestock, especially cattle raised for both meat and milk. If cattle were a country, it would rank third in emissions behind the United States and China." (ESPAS report 2019, p. 9) Other studies have shown that livestock farming causes 51% of the worldwide greenhouse gases (Goodland, R; Anhang J., Livestock and Climate Change, 2009). They include e. g. the lost CO2 absorption of livestock-relatetd deforestation. In his statement on International Forest Day, United Nations Secretary-General Guterres said: "The deforestation is caused mainly by the transformation of habitats for the extensive agriculture." (21.3.2020)

What we eat is connected with climate change and to a larger extent with species extinction. To examine these interrelations in depth and to open up alternative ways of action, the AGRIPOL project develops a blended learning course for VET teachers.

The **face-to-face- Training activity** is part of the blended learning course, which includes also online courses in four languages (e.g. addressing sustainable development goals such as 'life and land' > examples for sustainable, inventive practices e. g. Navdanya, India], a Curriculum with hands-on learning and teaching material [interrelation between free trade agreements, EU regulations in the field of agriculture and policies at national level].

The face-to-face-part is created as an in situ-event.

Key objective(s)

The key objectives of this action are the need for Education for Sustainable Development (ESD), Critical reflection on consumption and consumerism, focusing on long term behavioral change addressing the issue of „Cognitive Dissonance", showing the diversity of possibilities for Action, ceating real Agents of Action, Outlining possibilities of individuals by following a holistic approach of contextualizing and no simplification of issues.

Target groups of the training

The module is addressed at vocational teachers but the material is further to be used by them for their students.

Contents for the face-to-face module

(1) Consumerism

Subject nr. 1 raises the question why do we consume? It elaborates the necessity to consume vs. luxury, different movements and approaches, the contextualization of sustainability and consume – reference to different situations e.g. social position, privilege of consume and sustainable consume as well as the problematization of substitute products and the outsourcing of problems (e.g. soy and avocado), veg. not necessarily sustainable. Also different effects of consumption on individuals (stress, status…) and the connection with current economic system and problematization are targeted.

(2) What does really motivate us for action?

Subject nr. 2 refers to the question why do we behave in a certain way (when it comes to society, education, values)? How do we achieve long-term change in behavior? It formulates strategies for action like unconventional forms of action (boycott of goods, demonstrations, volunteering, etc.) and gives a collection of concrete ideas for actions in respective context.

(3) Cognitive dissonance

In this subject cognitive dissonance is explained by focusing on the psychological background, but also personal involvement/experiences (e.g. smoking vs. health) including the challenge of recognize situations and looking for strategies to overcome. The connection to environmental protection and climate change and ones individual responsibility for own impact on environment is outlined.

(4) Individual influence on environment

In this subject, nutrition/health plays a role asking the questions how does our nutrition influence the food system, what is foodsharing, what could be done to multiply knowledge about ecological behavior?

(5) Political possibilities for action

Subject 5 evaluates political possibilities concerning the CAP and asks the question wow can you take action on systemic level by targeting interest groups as well as lobbying groups.

(6) Information Material and (7) Didactic training for ESD in education

The last two subjects list collections of guides and counsellors for sustainable behavior (WWF, Greenpeace, zero waste guidelines, Cosmetics, Household, …), reliable ecological labels. Furthermore, training approaches are given following the question of how to create a positive setting learning about sustainable development by enabling critical thinking ability of students.

Relevance of the training

In teacher education and training, there is still a great need to integrate Education for Sustainable Development (ESD) - especially from the perspective of Global Learning. On site, participants can discuss with experts and have the opportunity to reconsider their own options for action and change them if necessary.

Intended Results of the training

Possibilities of how to address the phenomenon of 'cognitive dissonance' within Education for Sustainable Development (ESD) in a student-oriented way. This involves, for example, the creation of a 'setting' and exemplary action. The central question addressed by the participants is: How can previous (eating) habits be changed to be as long-lasting as possible?

Online Course

As part of the Blended Learning Course the Moodle-Online-Course created by the Agripol consortium provides the opportunity to deal with the topics in an online self-learning setting

It includes three steps - Read, Intensify and Apply. The course is divided into a series of learning steps. In each sequence, participants* receive reading material and have the opportunity to complete assignments to deepen their knowledge on topics that touch on CAP decision-making processes, ecosystem impacts, and climate change mitigation and ecology in agriculture, among others. A final multiple-choice test is administered once all learning steps have been completed.

The course is freely available at:
https://fortbildung.haup-lp.at/course/view.php?id=4501&section=0#tabs-tree-start

Model agenda/timetable for a three-day in-person training

Day I	
10:00	Opening and Organisation
10:05	Introducing the program • Blended-Learning-Course Agenda • Evaluation
10:30	At a glance: objectives the AGRIPOL-project
11:00	**COFFEE**
11:30	IO3: Theoretical Input: Cognitive Dissonance/Motivation (with exercises)
13:00	Evaluation & Feedback
13:30	**LUNCH**
15:00	Warm-Up-Exercise
15:15	IO3: Consumerism (with exercises)
17:00	**End of day I**

Day II	
09:00	Warm-Up-Exercise
09:15	IO3: Individual influence on the environment (with exercises)
10:45	Evaluation & Feedback
11:00	**COFFEE**
11:30	IO3: Participation (with exercises)
13:00	Evaluation & Feedback
13:30	**LUNCH**
15:00	IO3: Presentation Infomaterial and didactic Training
16.00	**End of day 2**

Day III	
09:00	Warm-Up-Exercise
09:15	IO6: Presentaton Teaching units I
10:30	Evaluation & Feedback
11:00	**COFFEE**
11:30	IO6: Presentation teaching units II
13:00	Evaluation & Feedback
13:30	**LUNCH**
15:00	Reflection/Evaluation and Online-Phase

2. EDUCATION FOR SUSTAINABLE DEVELOPMENT

The Global Citizenship Education is one of the UNESCO's Education Program and it can be defined as the education "nurturing respect for all, building a sense of belonging to a common humanity and helping learners become responsible and active global citizens" (UNESCO,2019). The Global Citizenship Education aims to empower students to assume active roles to face and resolve global challenges and to become proactive contributors to a more peaceful, tolerant, inclusive, and secure world. In order to know the presence of the Global Citizenship Education in the region's curricula, thirty-nine globalizing concepts associated therewith were identified, such as tolerance, diversity, rights, participation, reflective thinking, critical thinking, creativity. In the context of Global Citizenship Education, we should take into account the importance of education for sustainable development in various areas such as of policy, agriculture, horticulture, and plant protection. The project AGRIPOL makes an important contribution to the implementation of the EU Sustainable Development Goals.

Education for Sustainable Development

ESD is a part of Agenda 21 which was established in 1992. United Nations documents describe following basis of action for ESD: "Education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. While basic education provides the underpinning for any environmental and developmental education, the latter needs to be incorporated as an essential part of learning. Both formal and non-formal education is indispensable to changing people's attitudes so that they have the capacity to assess and address

their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. Addressing and understanding the dilemmas and challenges of sustainable development requires skills in critical thinking and problem solving thus it can encourage critical thinking. One issue that AGRIPOL project focuses on the individual level is the question "How can a change in behaviour be initiated and how can the new behaviour be maintained in the long term?" In our materials we want to make the students find it out and draw their own conclusions. To be effective, environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment, and human development should be integrated in all disciplines and should employ formal and non-formal methods and effective means of communication."

The main aim of ESD is to prepare the younger generation to be responsible citizens of the future. Students should be ready to take part in a democratic society and be able to sustainably help shape the future society. They should learn to take responsibility for themselves and future generations based on the concept of sustainable development. Formal educational efforts are to help students to develop abilities for recognizing and expressing their own interests among society-at-large and participate within a democratic society as responsible citizens, both today and in the future They should focus on real changes within society on local, regional and global levels. Our project deals with the structural level analysing certain aspects of the Common Agricultural Policy of the EU. It is worth mentioning the undertakings promoting sustainable development. One of them is Global Education Week (GEW) that is a global awareness-raising initiative and a call to jointly rethink and change our world, using global education as a tool for solidarity and change. We also want to encourage people to participate in activities at the local level. Multiplier events

are held as part of our project. They are to activate schools workers and decision makers. The project AGRIPOL partners will develop various materials for their use.

Economic and social progress has been accompanied by environmental degradation that is endangering the very systems on which our future development depends. Each year, an estimated one third of all food produced ends up rotting in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices. Sustainable consumption and production is about doing more and better with less. It is also about decoupling economic growth from environmental degradation, increasing resource efficiency and promoting sustainable lifestyles. Sustainable consumption and production can also contribute substantially to poverty alleviation and the transition towards low-carbon and green economies.

In order to avoid overconsumption and overproduction there main principles to be introduced: 1. Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows. 2. Optimise resource yields by circulating products, components and materials at the highest utility at all times in both technical and biological cycles. 3. Foster system effectiveness by revealing and designing out negative externalities, including damage to other systems (food production, forests) and externalities such as land use, and air, water and noise pollution.

One of AGRIPOL's priorities is to prove that changing eating patterns to reduce the consumption of animal products is one of the viable solutions that can reduce greenhouse gas emissions and their effects. In the issue of changing attitudes, the theory of cognitive dissonance is often used, which can be used to reduce the consumption of animal products. Realising the inconsistency between the behaviour and the declared attitudes will tend to reduce the consumption of animal products. Arousing cognitive dissonance can cause behavioural change, as manifested by a tendency to reduce the consumption

of animal products. These conclusions can be applied to various situational contexts in which the desired behaviour change may be difficult to achieve by resorting to traditional forms of persuasion only. They can be used by policy makers in the process of creating large-scale impact plans.

Projects and initiatives are considered good practice if they are closely related to ESD, generate ideas and contribute to policy development. They must have some of the following outcomes and characteristics:

- Focus on educational and learning dimensions of sustainable development;
- Innovative development of new and creative solutions to common problems;
- Make a difference and have a tangible impact on those concerned;
- Have a sustainable effect;
- Have the potential for replication;
- Support evaluation in terms of innovation, success and sustainability

In the promotion and implementation of ESD, there is a need to continuously adapt existing educational programs to the objectives of ESD. This includes promoting public awareness and developing a public understanding of sustainable development and providing hands-on training related to the ESD components. ESD should be improved through formal, non-formal and informal education. At the school level, teachers, principals and community members are more likely to develop and maintain ESD initiatives and then build and maintain community partnerships that promote ESD. Our project goal is to strengthen the target groups which are teachers and trainers in vocational education and training, VET students, and decision-makers on curricula in educational authorities.

It should be noted that the key issues must not only be learned but also practiced in the curricula. Following the COVID-19 pandemic, it was realized that teacher training should focus on improving teaching and learning via online

platforms and remote classrooms so that ESD initiatives and programs can be carried out with the minimum amount of time required. In addition, the improvement of ESD should be considered in the school curriculum based on an interdisciplinary approach.
All these criteria are met by AGRIPOL Blended Learning Training.

Literature

https://pubs.rsc.org/en/content/articlehtml/2012/rp/c1rp90060a Education for Sustainable Development

https://www.developmenteducationreview.com/issue/issue-6/education-and-sustainable-development

https://en.unesco.org/sites/default/files/education_for_sustainable_development_final_-_january_2021_1.pdf

3. FACE TO FACE MODULE

Consumerism

Content

The module covers the basics of consumerisms, the reasons behind it and its relation to sustainable development. Key topics are:

- Consumerism
- Consumption and its characteristics
- Interrelation between consumption and sustainability
- Conscious consumption vs overconsumption

Objective

Upon successful completion of this module, trainees will be able to understand the main problems of consumerism in relation to the individual, the society and the environment. They will be able to identify the risks related to overconsumption and assess potential ways to address them.

Teaching and Learning Method

The module is delivered using a mix of group and individual exercises. In the beginning, the participants work individually on a task "Stream of Consciousness on "Consumerism". Then the outcomes are discussed between them. In the second exercise, the trainees independently read a text about consumerism and prepare a short presentation. Then they present their findings. The third exercise includes a group discussion about the connection between sustainability and consumerism. The last task is again reading a text about consumption habits and sustainable behavior. Open questions or suggestions are freely expressed with the aim of joint results-oriented thinking and exchange. The course finishes with an additional task "Poster Checklist: The Future of our Consume in

Everyday School Life". It foresees an individual development of a poster and a group discussion.

What does really motivate us for action?

Content

The module explains the course of motivation. It involves scientific theories and practical aspects of why we do the things we do. Key topics are:

- Motivation and behavior
- Values
- Strategies for action
- Long-term change in behaviour

Objective

Upon successful completion of this module, the trainees will acquire theoretical knowledge of the motives behind the actions of an individual. In addition to the theoretical foundations, they will be able to practice the relation between values, motives, behavior and actions.

Teaching and Learning Method

The module is delivered using a mix of methods. The reasons behind the actions of an individual and the possible strategies for action are presented in short lectures. The practical part includes two exercises: "Pyramid of Values" and "Design the Sustainable Green Future".

Cognitive Dissonance

Content

This module offers a brief introduction to psychology and specifically to the theory of cognitive dissonance. It is a state of inner tension, discomfort, and distress that arises when we discover an inconsistency (contradiction) in our cognitive system of judgment. Key topics are:

- Festinger's theory of cognitive dissonance
- Personal reaction to cognitive dissonance
- Ways to reduce cognitive dissonance
- Practical application of the cognitive dissonance theory

Objective

Upon successful completion of this module, the trainees will acquire theoretical knowledge of Festinger's theory of cognitive dissonance and its application in real life situations.

Teaching and Learning Method

The module starts with a lecture by which the trainees get a basic introduction to the theory of cognitive dissonance. Afterwards, during the project group work, they have the opportunity to discuss relevant questions together. The entire module relies on active interaction and discussion.

Individual Influence on the Environment

Content

The module surveys the impact of the individual on the environment. It focuses on the relation between food, eating habits and sustainability. Key topics are:

- Personal impact on the environment
- Leftover food
- Sharing Food
- Climate friendly nutrition
- Ecological footprint

Objective

After the completion of the module, the trainees will be able to identify the risks for the environment because of unsustainable eating habits and to provide potential solutions to avoid them.

Teaching and Learning Method

The module is delivered through a combination of short lectures and practical exercises. It starts with an introductory task: Our Impact on the Environment. Then a short lecture provides the basics of the concept of food sharing. The trainees have the possibility to exercise that through two practical tasks. Later, a short overview of "leftover food" prepares them for the next practical exercise. In the next phase the impact of the eating habits and the theory of ecological footprint are introduced. After the theoretical part the trainees again work on an assignment. The module ends with a short lecture and an exercise on how to "spread the word".

Opportunities for Participation

Content

The module explains how an individual can contribute to a positive change by personal behavior and influence on the decision-making process. Key topics are:

- Common Agricultural Policy (CAP)
- Influence on the decision-making process
- Personal behavior as a way to contribute to a positive change
- Importance of labels
- Personal diets
- LEADER

Objective

After the completion of the module, the trainees will have theoretical knowledge on the CAP and LEADER and practical skills on how to provoke positive developments by individual behaviour and influence on the decision-making process.

Teaching and Learning Method

The module is delivered using a mix of methods. Each theoretical part is followed by several practical tasks where the trainees individually or in groups practice the acquired knowledge.

Information Material

Content

The module focuses on information materials as a way to provoke change. Key topics are:

- Waste
- Reliable ecological labels
- Community involvement

Objective

After the completion of the module, the trainees will be able to critically read texts and look for solutions to environmental problems.

Teaching and Learning Method

The module allows the trainees to work individually on two tasks. They have to read two articles and critically think about them with the help of provided questions.

Didactic Training for Education for Sustainable Development (ESD) in Education

Content

The module covers successful practices to teach sustainable development. Key topics are:

- Positive setting for learning about sustainable development
- Critical thinking ability of students
- Different styles of learning

Objective

After the completion of the module, the trainees will have enough knowledge and skills to successfully conduct lessons on sustainable development.

Teaching and Learning Method

The module is delivered mainly through lectures. In between them the trainees have to work on an exercise which allows them to understand their learning styles. At the end of the module they are provided with a set of topics and possibilities for action which they can implement in their lessons.

4. ANNEX: EVALUATION FORMS

On the following pages this documents provides two evaluation forms to be used in context of the Blended-Learning-Course.

One is to be used to test the previous knowledge of the participants prior to the training.

The second form is for the evaluation of the training and to test the improvement of the knowledge about the topics being addressed.

Annex I

TEACHERS TRAINING
PREVIOUS KNOWLEDGE FORM

1. Do you have a pedagogical education?

- ☐ Yes
- ☐ No

2. In which type of school do you teach?

- ☐ Vocational school
- ☐ High school
- ☐ University
- ☐ Pedagogical college
- ☐ Other

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3. How much do you agree with the statements?

	Strongly agree	agree	disagree	Strongly disagree
I have exact expectations about the training				
I expect an increase in knowledge about EU				
I expect class preparations				
I expect learning material for my students				
I expect new learning methods				
I want to meet new colleagues				
I want to get familiar with other countries				

4. Select your age group

- ☐ 20 - 30 years
- ☐ 31 - 40 years
- ☐ 41 - 50 years
- ☐ 51 – 60 years
- ☐ Older than 61 years

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5. Do you have an agricultural background?

- ☐ Yes
- ☐ No

6. Do you have a prior knowledge of the common agricultural policy of the EU?

1	2	3	4	5	6	7	8	9	10

No Knowledge — Much Knowledge

7. How strong does education in sustainable developements effect your students?

1	2	3	4	5	6	7	8	9	10

Not at all — Very strong

8. How strong does education in sustainable developements encourage your students for critical thinking?

1	2	3	4	5	6	7	8	9	10

Not at all — Very strong

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9. Do you think that common agricultural policy has an impact on your personally aspects of life?

- ☐ Yes
- ☐ No
- ☐ Maybe

10. Do you think that a change in our eating habits has an impact on agriculture?

- ☐ Yes
- ☐ No
- ☐ Maybe

11. Cognitive Dissonance - Have you ever heard about cognitive dissonance?

- ☐ Yes
- ☐ No
- ☐ Maybe

Annex II

TEACHERS TRAINING EVALUATION FORM

1. Has your knowledge about the common agricultural policy been improved?

- ☐ Yes
- ☐ No

2. Do you feel your expectations have been met?

- ☐ Yes
- ☐ No
- ☐ Maybe

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3. How do you rate the performance of the teachers?

1	2	3	4	5	6	7	8	9	10

Very bad Excellent

4. How much do you agree with the statements?

	Strongly Agree	Agree	Disagree	Strongly Disagree
The presenting teachers were well prepared				
The teacher encouraged for participation				
The presenting teachers answered questions very well				
The presenting teachers communicated the contents very well				
The timemanagement was respected by the presenting teachers				

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5. How effective were the following aspects of your experiences in this training?

	Very ineffective	Somewhat ineffective	Somewhat effective	Very effective
Lesson materials used in the course				
Lesson activities used in the course				
Lesson methods used in the course				
Organisied group activities after the course				

6. How useful are the used lesson materials for you personally?

- ☐ Extremely useful
- ☐ Somewhat useful
- ☐ Somewhat not useful
- ☐ Extremely not useful

7.How useful were the learing activities for you as a teacher?

- ☐ Extremely useful
- ☐ Somewhat useful
- ☐ Somewhat not useful

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- Extremely not useful

8. How useful are the used lesson materials for your school?

- Extremely useful
- Somewhat useful
- Somewhat not useful
- Extremely not useful

9.How useful were the learning activities for your school?

- Extremely useful
- Somewhat useful
- Somewhat not useful
- Extremely not useful

10. Did you like the structure of the training?

- Yes
- No
- Maybe

11. At a glance - the Agripol project - How familiar are you now with the key points of Agripol?

1	2	3	4	5	6	7	8	9	10

Very Bad Excellent

12.Do you have a better understanding of cognitive dissonance now?

- ☐ Yes
- ☐ No

13. Describe some impacts of common agricultural policy on your aspects of life.

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14. How can a change in our eating habits effect our environment? Jet down a few notes.

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