



# Global piloting implementation report

Flipped classroom training Approach for Clothing and Textile Innovative VET Education



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







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

#### EXECUTIVE SUMMARY

This document is a publicly available synthesis of the piloting phase reports presented by all FACTIVE members and the Intellectual Output number 5 of the FACTIVE project. Its aim is to gather the users' opinions on the experience with the developed materials and methodology (IO2: FACTIVE Learning Methodology on Flipped Classroom, IO3: MOOC and IO4: FACTIVE Handbook) in order to ensure the effectiveness and applicability of the already stated resources and to make changes (if needed) before they are distributed or offered widely.

The FACTIVE Global Pilot Report collects the experience and conclusions of the piloting of the project lessons. 102 VET students and textile workers were trained with the FACTIVE lessons and activities which were focused on Textile Sustainability. Furthermore, these lessons were designed to follow the Flipped Classroom methodology.

In order to get feedback on the proposed activities, surveys were handed out to the participants. The results of the surveys were then analysed in order to see the degree of success of the lessons and whether or not some concrete improvements were possible.

Finally, all the lesson activities can be found in the appendix in case someone wants to use them.



**TABLE OF CONTENTS** 

**Executive summary** 



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

2

4

#### 2020-1-PT01-KA202-078344

$\mathbf{N}$			
	/		
	,		
$\langle$			
	/		

1. Introduction	4
2. Piloting phase	5
3. Assessment and Results	7
3.1 Initial expectation and starting knowledge	7
3.2. Satisfaction	11
3.2.1. Global assessment	11
3.2.2. Conception and organisation of training	12
3.2.3. Development of training	16
3.2.4. Comments and suggestions for improvements	22
4. Conclusions	25
5. Annexes	26
Learning Unit 2: Sustainability scope - Ciape & LCU	26
Learning Unit 3: Textile & Clothing sustainability - IVOC	35
Learning Unit 4: Sustainable textile materials - Modatex	40
Learning Unit 5: Process and new technologies- AEI Textils	47
Learning Unit 6: Environmental social governance - Ins. Terrassa	52
Learning Unit 7: Design for circularity - Cre Thi Dev	57
Learning Unit 8: New business models - Citeve	59
Learning Unit 9: Bringing sustainability to the consumer -Step	62







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

#### **1. INTRODUCTION**

Now that the FACTIVE Project comes to an end, it is time to review all the piloting experiences and reinforce the feedback loop between the students and trainees and the organisers. The FACTIVE IO5 is the culmination of this project. After four IOs dedicated to the preparation of a Textile Sustainability course using the Flipped Classroom methodology, this IO is set on the execution of these activities and their evaluation.

To this end, and following the steps set on previous stages of this project, each partner has prepared and executed a lesson of the project using the Flipped Classroom methodology:

- 1. Previous knowledge assessment.
- 2. Survey on the previous expectations of the trainees and students.
- 3. Visualisation of the lesson videos.
- 4. Learning consolidation activity.
- 5. Course satisfaction survey.

In this document the results of each partner's surveys are reviewed and analysed. This is precisely our main way of assessing the strengths and weaknesses of this project, and to reinforce the feedback loop.

Furthermore, all the partner's thoughts and conclusions of this experience are also compiled in the conclusion section. Evidence of the lesson planning and executed activities can be found in the annex.

All in all, all the partners agree that the piloting had positive results and the feedback from students and trainees was overwhelmingly positive.





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

#### **2.** PILOTING PHASE

The purpose of piloting is to make sure about the effectiveness and applicability of the resources (Factive Learning Methodology, MOOC and Factive Handbook), and to make changes before it is distributed or offered widely.

In order to evaluate the response of the students and the strengths and weaknesses of the FACTIVE project, a pilot test was conducted. Each partner would implement a full unit. In total, 8 learning units were tested and it was distributed like is shown in the following table. Note that the first unit is an overview, so it was not tested.

Learning Units	Partner
Learning Unit 1: Course Overview	-
Learning Unit 2: Sustainability scope	Ciape and LCU
Learning Unit 3: Textile & Clothing sustainability	IVOC
Learning Unit 4: Sustainable textile materials	Modatex
Learning Unit 5: Process and new technologies	AEI Tèxtils
Learning Unit 6: Environmental social governance	Ins. Terrassa
Learning Unit 7: Design for circularity	Cre Thi Dev
Learning Unit 8: New business models	Citeve
Learning Unit 9: Bringing sustainability to the consumer	Step

Each partner would implement their lesson with a minimum of 10 students or trainees. This unit would be worked in two sessions of 90-120 minutes. The first session is previous knowledge assessment. Afterwards, students would watch the unit videos from home, following the flipped classroom methodology. The second session is the consolidation of the unit they have learned.

All partners and cooperative organisations made sure that the important features of the piloting phase were planned, followed up and recorded in an homogenic manner. In the annexes you will find several documents that partners made to ensure all participants use the same methodology to plan and compile evidence of the piloting sessions they have implemented.

The target audience for this training was vocational training students and workers in the textile and fashion industry. 102 trainees between 16 to 54 years old have participated in this piloting.





## 2020-1-PT01-KA202-078344

The implementation of training sessions with real students/workers using the MOOC (IO3), following the Flipped Classroom methodology (IO2) and applying the FACTIVE Handbook (IO4) is very important for the development of the project, but it would be incomplete without a comprehensive evaluation of the piloting sessions done by the students/workers that attended the lessons and the recording of the impressions of the same learners but also the opinions of the trainers that prepared and provided them.

To assess the pilots' implementation results we will use an evaluation based on levels 1 and 2 of the <u>Kirkpatrick model.</u><sup>1</sup> Kirkpatrick's Four-Level Training Evaluation Model can be used to determine how well some team members or students have learned from the training, to evaluate the impact of the training objectively, and to enhance their future learning. This model integrates a sequence of four evaluation levels; but only 1 and 2 should be used for this project:

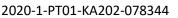
- <u>Level 1:</u> Evaluates the first reaction of the participants to the training (questions: What is the trainees background and knowledge on the subject? To what extent were the trainees motivated with the training?)
- <u>Level 2</u>: Evaluates the lessons learned (question: To what extent did the trainees learn from the training and find its methodology useful?)
- Level 3: Evaluates behaviours in the actual context of work. (Does not apply)
- Level 4: Evaluates the training results. (Does not apply)

Two surveys have been created in order to compile the trainees' opinions on the lessons they will attend/have attended. The first one (based on level 1) would be completed before students/workers start the training sessions, as it focuses on assessing the reactions of trainees to the program. The purpose of assessing this dimension is to ensure that trainees are motivated and interested in learning. The second one (based on level 2) would be done at the end of the learning unit because it is centred on measuring acquired knowledge, improved skills and the changed attitudes as a result of training.

In order to facilitate the analysis of data, an online survey has been created and available in the Moodle platform of Link Campus University, so trainees will be able to answer it directly online. These questionnaires have been translated into each partner's native language to make sure students/workers fully understand what they are being asked, enabling us to obtain more accurate results

 <sup>&</sup>lt;sup>1</sup> Link to the article: "The Kirkpatrick model: A useful tool for evaluating training outcomes" by Smidt, A., Balandin, S., Sigafoos, J. and Reed, V.
 D5- Global report on the piloting implementation sessions
 Page 6 of 58







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

#### **3. ASSESSMENT AND RESULTS**

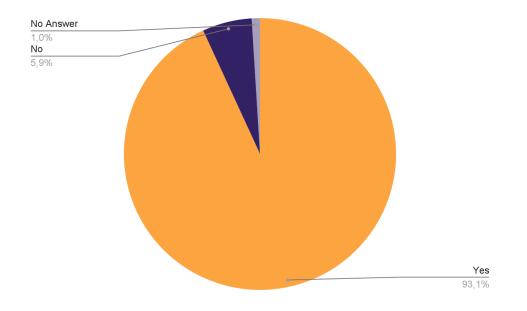
In order to assess the expectations of the participants and their satisfaction after the training the students/workers were given an "initial expectations and starting knowledge" questionnaire before the piloting and a "satisfaction" survey once the course had finished. The graphics that follow are the summary of the results obtained through these questionnaires.

From the answers obtained, we can make a profile of the participants stating that over 60% of them are women aged between 16 and 54 years old. Around 55% of the respondents are students, 15% of them work in the textile industry, 12% work in another industry and 8% are looking for a job.

# 3.1 Initial expectation and starting knowledge

102 participants from Belgium, Greece, Italy, Portugal, Slovenia and Spain answered the "Initial expectations and starting knowledge" survey.

# - Do you think that the programme planned for this training is in line with your training <u>needs?</u>





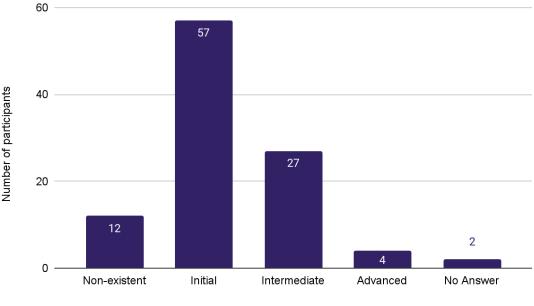


Erasmus+ Programme of the European Union

#### What do you consider most important to learn or deepen in this training?

From all the answers obtained on this open question the ideas that appear repeated several times are the following:

- Some participants talk about the fact of learning in general, considering the positives of acquiring any new knowledge; while others are more specific referring to their willingness to deepen concepts like the environmental impact of fashion, sustainability, pollution, recycling, reusing, circular economy...
- The concern about the future of fashion and the textile industry.
- Networking and opportunities to discuss the subject with similar professionals.
- New production technologies and processes.
- Market trends in the fashion industry.
- Development of new textile fibres.
- And, lastly, we see some opinions related to the learning methodology used in the training and their interest in gamification and the videos of the course.



## What is your starting knowledge in relation to this training?

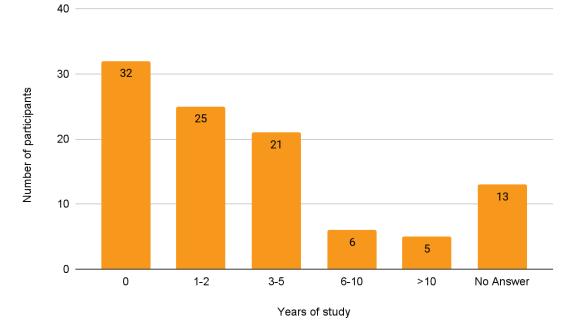
Starting knowledge level



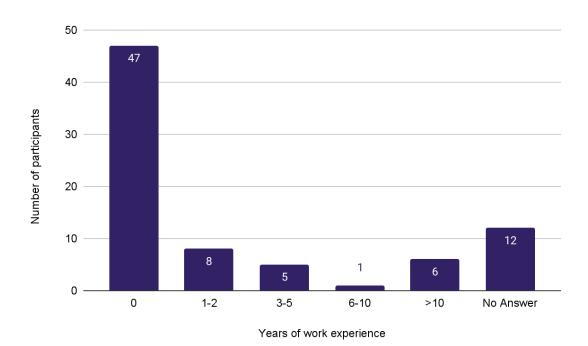






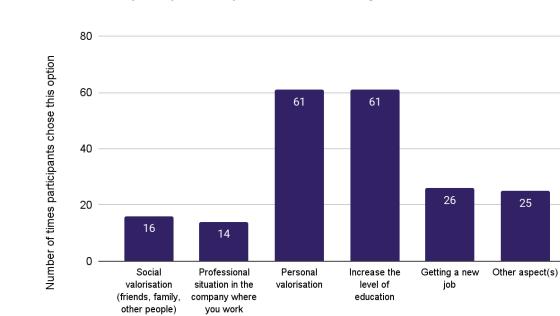


- <u>How many years of work experience have you dedicated to the T&C industries</u> <u>previous to this pilot?</u>



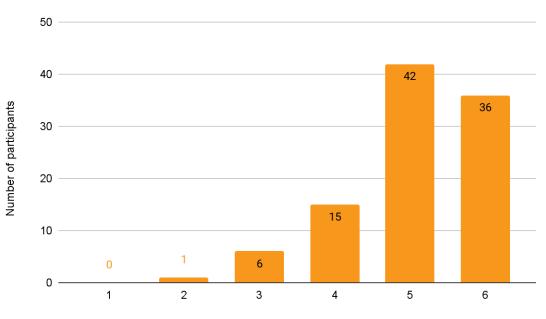






#### What do you expect to improve with this training?

Participants could chose more than one option



# - Quantify your motivation for this course on a scale from 1 to 6 :

Motivation: 1=not motivated at all, 6=totally motivated





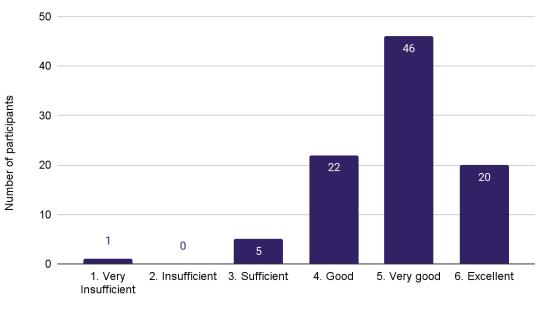


# 3.2. Satisfaction

94 participants from Belgium, Greece, Italy, Portugal, Slovenia and Spain answered the "Satisfaction" survey.

#### 3.2.1. Global assessment

# - What evaluation do you attribute to this training?



Evaluation

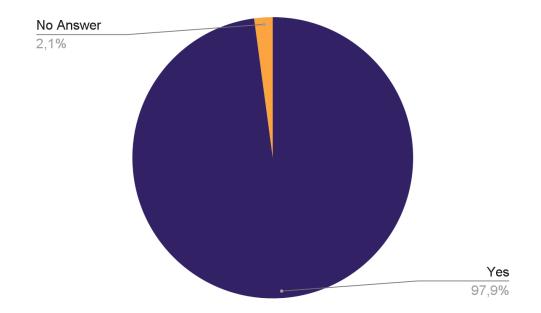
# - Has this training been useful to you?



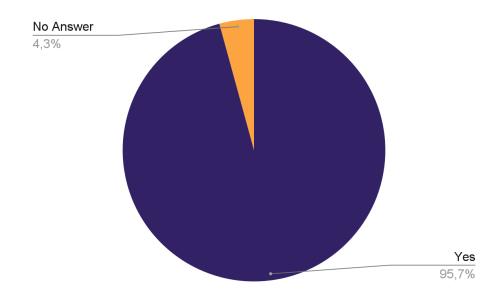


Co-funded by the Erasmus+ Programme of the European Union

2020-1-PT01-KA202-078344



# - Would you recommend this training?



# 3.2.2. Conception and organisation of training

Participants evaluated the following aspects of training from 1 to 6. 1 being the most negative value and 6 being the most positive one.

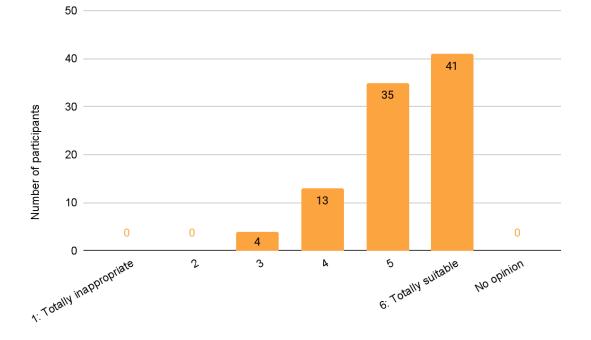
# - The quality of the didactic resources [documents, books, presentations, tests]



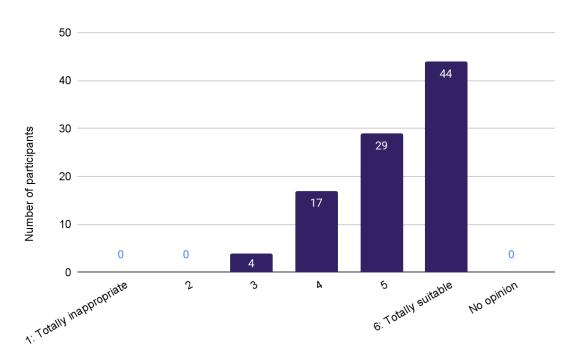
FACTIVE



#### 2020-1-PT01-KA202-078344



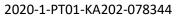
# - The adequacy of the equipments or tools used during the training

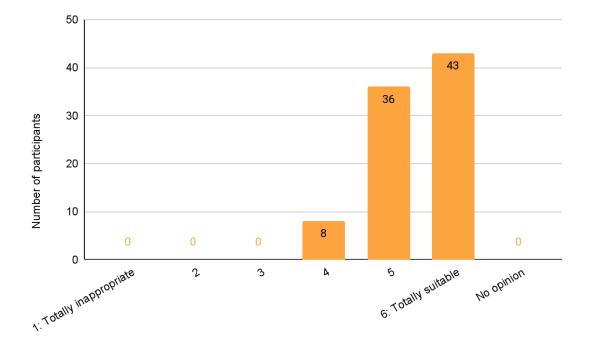


# - The quality of facilities (classical training)

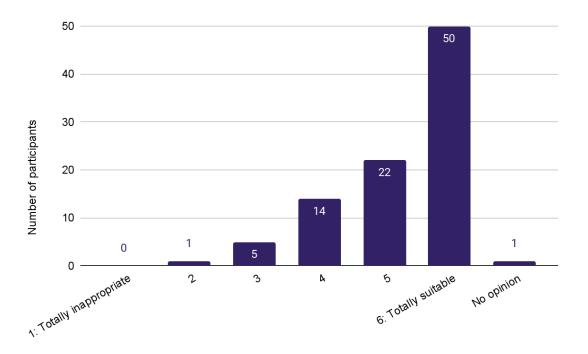








- <u>The accessibility of the contents and activities in the e-learning platform (on-line training)</u>



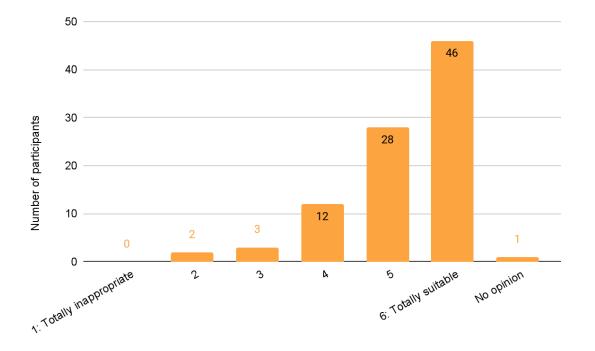
#### - The navigation structure on the e-learning platform (on-line training)

D5- Global report on the piloting implementation sessions www.factiveproject.eu

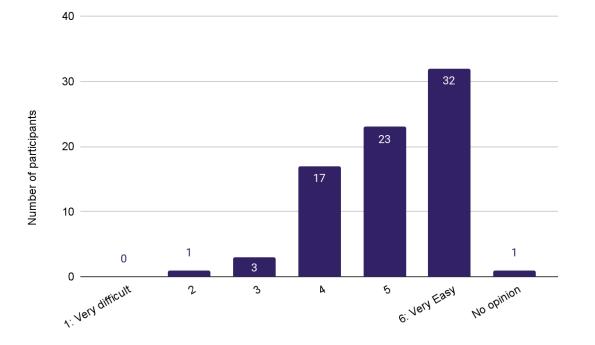




#### 2020-1-PT01-KA202-078344



In case you were asked to do collaborative activities during on-line training sessions, was it difficult to solve them through the platform?



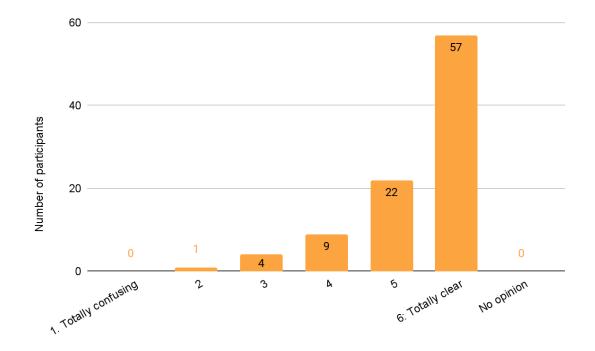
#### - The language used in the learning resources.



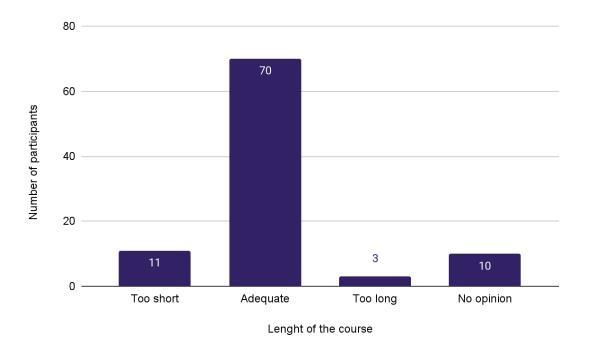


Co-funded by the Erasmus+ Programme of the European Union

#### 2020-1-PT01-KA202-078344



# - How do you classify the training duration?



# 3.2.3. Development of training

# - The interest aroused by the training

D5- Global report on the piloting implementation sessions www.factiveproject.eu

Page 16 of 58



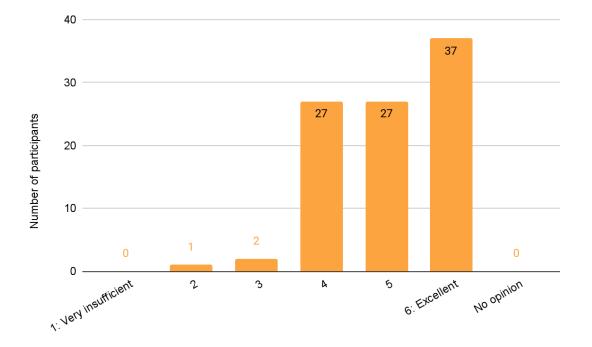
<

FACTIVE

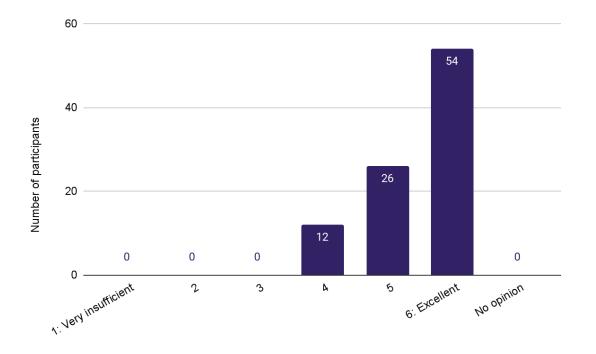


Co-funded by the Erasmus+ Programme of the European Union

#### 2020-1-PT01-KA202-078344



# - The performance of the trainer(s)



How do you rate the experience of having prior access to class content?
 D5- Global report on the piloting implementation sessions
 www.factiveproject.eu

Page 17 of 58

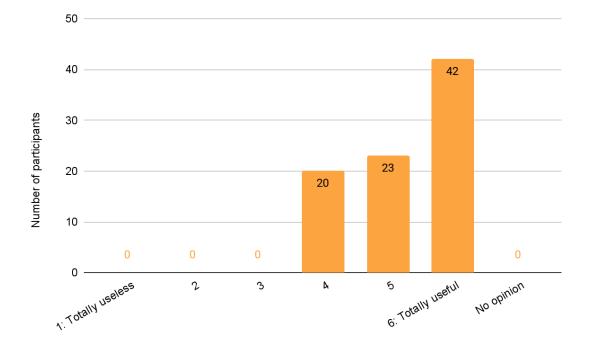


\_

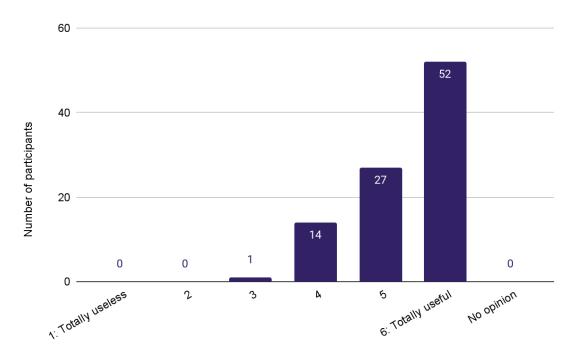
FACTIVE



#### 2020-1-PT01-KA202-078344



# Was the content viewed/analysed through the platform useful for your learning?



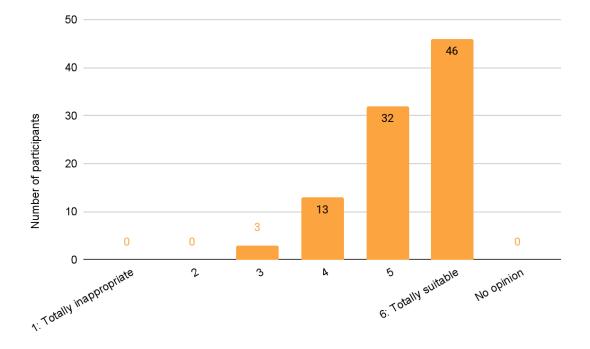
#### - The adequacy of the learning contents



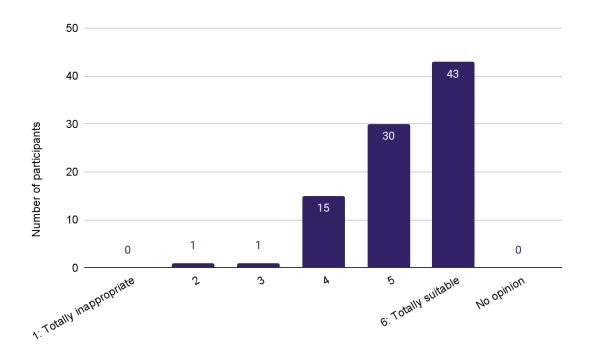
FACTIVE



#### 2020-1-PT01-KA202-078344



# - The adequacy of the evaluation activities



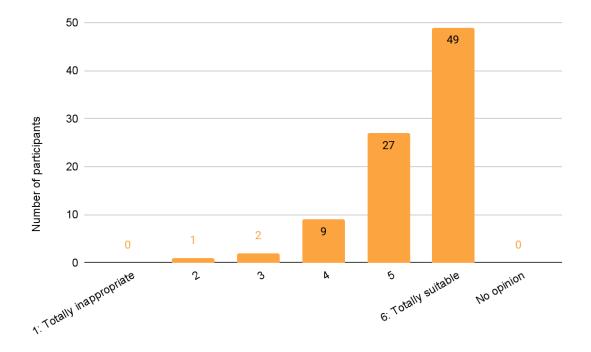
# - The relationship between participants/ trainees (classical training)



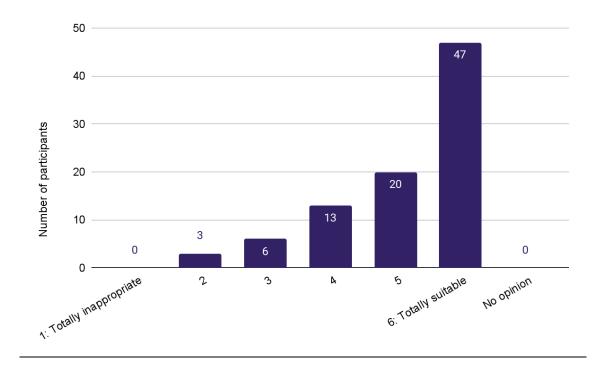
FACTIVE



#### 2020-1-PT01-KA202-078344



# - The degree of interaction during training (on-line training)



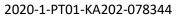
- In the classroom, were you able to clarify doubts about the content previously seen on the platform.

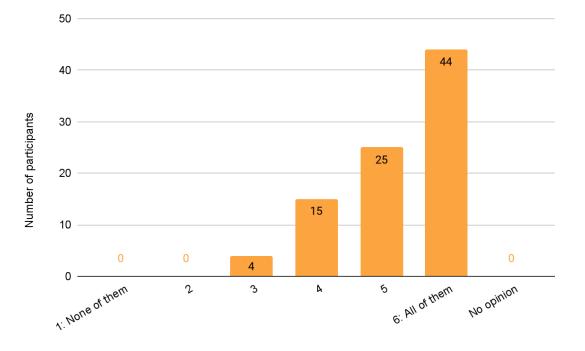


FACTIVE

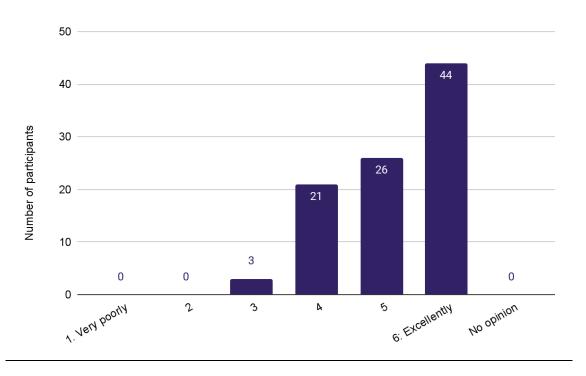


Co-funded by the Erasmus+ Programme of the European Union





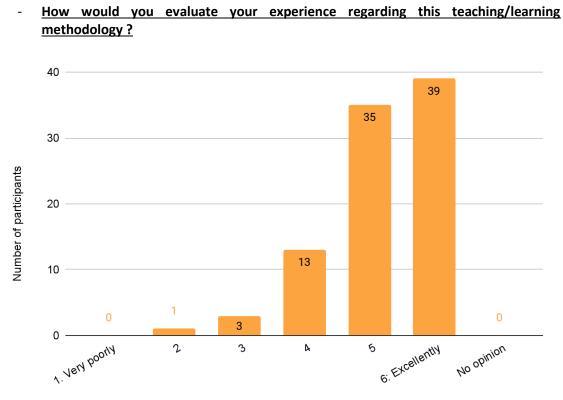
- <u>The participation in this training has enhanced my awareness and knowledge on the subject addressed.</u>







2020-1-PT01-KA202-078344



# 3.2.4. Comments and suggestions for improvements

Here we detail the most representative and repeated answers obtained on the satisfaction survey for the questions related to what trainers liked the most in the training and their suggestions for improvement.

#### What did you like the most in this training experience?

Methodology:

- The methodology used: having to watch the videos and read the contents before class. It allowed me to study in an autonomous manner, identify my doubts and ask about them later.
- The flipped classroom, work in groups and having to organise our own study time.
- Discussing the subject and learning the concepts through the platform.
- The possibility of doing the study and evaluation activities whenever we wanted.
- The possibility to search for information about a topic for ourselves.
- The creative methodology based on the use of LEGO bricks.
- The challenge of re-designing a traditional conference bag was very interesting.
- The possibility to experience new design thinking techniques.
- The analysis of the proposed case study.
- To get involved and try to concretely solve a real problem.
- I have really appreciated the initial online training that allowed me to have a specific knowledge about the contents to be treated during the workshop.
- The connection between the theoretical and practical parts.
- The novelty of the approach





#### Materials:

- The links and references provided by the trainer to learn more about the subject.
- The videos and the exercises were very interesting. I also find Kahoot and games a very interesting way to have students' attention. It was fun.
- Everything was very easy to understand and the unit had very good material.
- The fact that it can be accessed by everyone. Its openness.

#### Class dynamics:

- The group exercises to create a product.
- The training was very pleasant and fun.
- The subject was taught in a very clear manner.
- The interest of both parties (students and instructors) is well received.
- Interactivity, dynamism of the lessons.
- The opportunity to work with people having different backgrounds.
- The teamwork.
- The division of the participants into small groups allowed to share ideas and permitted an effective teamwork
- Collaborate with other students and with the teachers.
- The way students and professors interact
- The expertise and openness to discussion of trainers
- Being able to participate actively.

#### Others:

- Learn in depth about sustainable textile materials.
- The treated subject and the importance it has.
- The comparison between different solutions to the same problem.

#### What do you think could be improved?

#### Timing:

- The course should be longer, with more time between sessions.
- More time between the first lesson and the preparation of the final work in order to get a deeper product.
- A longer course. It was very interesting and there is much more to discover from this subject.
- In my opinion the workshop should be structured into two face to face sessions instead of only one.
- More time to discuss the content of the video lessons.
- Having more time to study the video lessons and the preparatory materials
- Have more time to view case studies and delve deeper into the topics covered

#### Language:

- Having all the materials in our own language.
- Translation of the materials.

#### Technology:

- The access to the platform was a little bit confusing.
- The accessibility to the materials.





#### 2020-1-PT01-KA202-078344

- More accessibility to everyone.
- The use of the Moodle platform: this allows the student to proceed with the units gradually and only after completing the previous ones, thus ensuring the those students actually follow the lessons.

#### Materials:

- The contents are quite basic if you already work in the textiles industry. It would be good to talk about new and more controversial fibres.
- I expected to be shown physical samples of the new textile materials we were talking about. I like the personal interaction and the learnings that can be achieved in class.
- More examples of pollution.
- Making materials more visual.
- It would be useful and also stimulating to insert summary tests in the middle or at the end of each unit, to assess the student's learning objectives and allow them to test themselves having an active learning.
- More specific contents, support of sectoral technical personnel to follow the project idea development process.
- The course could be improved by adding more training contents (articles, resources etc).
- Having more preparatory videos to watch.

#### Methodology:

- The lack of textile knowledge makes it difficult to study on your own.
- More in class lessons, debates, technical visits and practical essays could be very valuable for this training.
- More practical exercises.
- Having more basic information prior to our work at home, otherwise we can feel lost.
- Not everybody will do the work at home if this person is not motivated. Sometimes it is difficult for us to do the homework, let alone a whole lesson.
- Maybe a presentation at the beginning of the lesson showing us what type of results were expected.
- A better introduction.
- I would have appreciated a bigger class with more students.
- Considering the results developed by each group, I would have appreciated to have more information about processes and solutions effectively adopted by existing enterprises.
- It would have been better to have in-person training instead of online.
- More explanations about the topic of the challenge.





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

#### 4. CONCLUSIONS

The piloting of this project has been very useful to see the students/trainees' interest in this subject and how they responded to the methodology. The assessment surveys have helped to read and quantify this response and show very positive results. Apart from said questionnaires, video testimonials of trainers and trainees from all the participant countries giving their opinions on the sessions have been recorded and will be published together with this report.

Students/trainees were interested in the course and thought it could be good for their training. Once they finished it, the participants met their initial expectations and enjoyed the course; stating it had helped them enrich their knowledge on sustainable issues and practices applied to the T&C industry. All aspects related to the organisation and development of the training and the relevance of the topic were very highly evaluated (the average response in all questions is at number 5 out of 6: "very good"). The usefulness of the training received the highest average score, which is a very rewarding finding. The very positive comments in open-ended questions corroborated this analysis, since several participants mentioned that they intend to continue and deepen the subject, and that the use of this methodology facilitated their learning.

We can say that participants particularly appreciated the methodology: the possibility to have prior access to the training contents and spending the time in the class doing something practical. This gave them the possibility to directly apply what they had learned, challenging themselves with a real case study, sharing ideas with peers and discovering new stimulating design thinking techniques. They appreciated the opportunity to actively collaborate with other participants with the support and supervision of the instructor and the use of gamification to review theoretical topics studied in the self-study phase.

Pilotings allow us to find out any possible faults and determine what could be improved. Participants indicated that they would have liked to have had more time to study the video lectures and preparatory materials, with enough time between lessons and with longer in person sessions instead of online ones. Some problems were encountered accessing the MOOC through the Moodle platform and several students found it easier to do it via Youtube.

Although we have been evaluating pilot sessions, whose time duration is limited, it was possible to test the FACTIVE methodology, developed in the intellectual outputs 2 and 4, and understand its effectiveness in learning. The findings of the first surveys to companies and VET professionals about the most relevant subjects in the textiles and clothing industries nowadays, fit in the intellectual output number 1, have also been reassured through this training; as students have manifested sustainability to be a highly important and interesting issue. We can tell that the FACTIVE methodology was positively implemented and accepted by the trainees and the trainers and the materials elaborated (the MOOC on sustainability created for the 3rd intellectual output) will be of great use to other students, workers, companies and VET professionals.



2020-1-PT01-KA202-078344



#### 5. ANNEXES

# Learning Unit 2: Sustainability scope - Ciape

# FACTIVE Lesson Plan Design (Session 2)

Date: 31/05/2022	Learning Unit No. #2	Session No. #2			
Target Audience: VET students	Time: 3h				
Programmatic Content:		Didactic Resources:			
<u>1<sup>st</sup> part</u>		- FACTIVE MOOC on Youtube			
- Individual online prepa	ration (self-learning phase)	- Case study			
<ul> <li>Introductory presentat prototyping process</li> </ul>	ion of Factive project and LEGO	- Presentation of the methodology			
- Case study presentatio	n and explanation	- LEGO bricks			
- Division of the participa	ants into 3 groups				
- Brainstorming process					
- Idea development (stra	tegy) phase				
- Selection of the best id	eas				
- Prototyping with LEGO	bricks				
2 <sup>nd</sup> part					
- Plenary presentation of	the prototype (storytelling)				
- Discussion and Q&A					
Pedagogical Objectives:					
- To understand the thre	e pillars of sustainability and their	connections			
- To recognise the corpo	rate sustainability aspects and thei	r benefits			
	or sustainability issues in the T&C d related solutions that could be a	sector; the economic, environmental pplied			
- To get to know the Uni	ted Nation sustainable developme	nt goals			
	y having in mind sustainability channels and the available solutions	allenges T&C businesses are currently			
- To apply LEGO serious	olay as a design thinking technique				
- To develop a concise ar	nd effective storytelling to present	the solutions/ideas			
Pedagogical Techniques/Activit	ies:				
- Case study analysis					
- Team work					
- Brainstorming and idea	development				
- Prototyping using LEGC	Prototyping using LEGO bricks				
- Storytelling					

D5- Global report on the piloting implementation sessions www.factiveproject.eu 



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

#### 2020-1-PT01-KA202-078344

- Oral presentation
- Debate

Introduction:	On Going:	Conclusion:
General presentation of FACTIVE project objectives and results. Presentation of LEGO serious play methodology	After presenting a case study related to a TCLF enterprise facing environmental, economic and social sustainability problems (*see below),	In plenary each group presented to the others the realised prototype, sharing ideas and comments. After the presentation, opinions about the flipped classroom
pidy methodology	participants were divided into 3 groups of 3 people. Each group brainstormed possible solutions and developed a shared idea, that was prototyped using LEGO bricks. The solution consisted on a new product / solution or a strategy to be developed on a 2/3 years lifespan. A storytelling explaining the developed prototype was conceived by	methodology were shared; ex -post evaluation questionnaires were collected.
	prototype was conceived by each team.	

#### Assessment:

Working in groups and presentations

#### **Observations**:

Trainees were very participative during the entire process, they worked well in team sharing ideas and comments and collaborating for the realisation of the prototypes. Even if it was not required to find a solution to all the issues raised in the case study, all the groups straggled to conceive articulated and completed sustainable strategies both from the environmental, economic and social points of view, coming up with high valuable projects.

# **Plan Support**

It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.





#### 2020-1-PT01-KA202-078344

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	To define the case study and plan the lesson according to the trainees profile, the expressed training methodologies preferences and expectations.	To introduce the work, guide the session and answer the questions	To analyse the evaluation questionnaires to understand what worked and what did not
Trainee (T&C Trainee)	Watch the MOOC lessons, deepen the contents with the recommended resources	Brainstorming, select ideas, prototyping and present the work	

#### \*CASE STUDY

A T&C company is not applying sustainability in its production processes, has a poor waste disposal system and therefore it is causing damage to the local ecosystem. This has an impact on the company reputation

Alfa company based in Mestre is a company in the textile and footwear sector that produces sportswear using fabrics made of NC blends (88% Cotton and 12% Nylon).

The company also produces a line of sports shoes using mainly nylon, leather, polyurethane and vulcanized rubber, the various parts are assembled using glue.

Due to problems in the poor waste disposal of the dyeing process, and in the mismanagement of waste from the manufacturing processes, the company was accused of not respecting sustainability standards causing damage to the local ecosystem.

The news, thanks to the media, spread both locally and nationally, causing a negative impact on the corporate image and consequently on sales and profits.

#### TASK

Create one or more solutions (strategies, products, processes) capable of making Alfa company more sustainable (from an economic and / or environmental and / or social point of view), also taking inspiration from the sustainable development goals defined by the United Nations.





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

#### 2020-1-PT01-KA202-078344

Evidences







<



2020-1-PT01-KA202-078344



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

# 







FACTIVE



#### 2020-1-PT01-KA202-078344

# Learning Unit 2: Sustainability scope - LCU

FACTIVE Lesson Plan Design				
Date: 02/07/2022	Learning Unit No. #2	Session No. #2		
Target Audience: VET students	Time: 8h			
Programmatic Content:       Didactic Resources:       I         1 <sup>st</sup> part       -       FACTIVE       MOOC       O         Preparatory synchronous session (duration 90 minutes       -       Youtube       O         approx)       -       Case study       -       Case study         2 <sup>nd</sup> part       -       Presentation of the methodology       -       Mooclean term         3 <sup>rd</sup> part       -       Kahoot! (gamified self       self         Learning challenge group work (duration 4 hours approx.)       -       Kahoot!       self				
<ul> <li>Pedagogical Objectives: <ul> <li>To understand the three pillars of sustainability and their connections</li> <li>To recognise the corporate sustainability aspects and their benefits</li> <li>To understand the major sustainability issues in the T&amp;C sector; the economic, environmental and societal impacts and related solutions that could be applied</li> <li>To analyse a case study having in mind sustainability challenges T&amp;C businesses are currently facing, the constrains and the available solutions</li> <li>To understand how digital innovation can be applied to enhance sustainability in the T&amp;C sector</li> <li>To develop a concise and effective storytelling to present the solutions/ideas</li> </ul> </li> </ul>				
Pedagogical Techniques/Act-Case study analysis-Gamified self-assessi-Team work-Brainstorming and id-Oral presentation-Debate	nent using kahoot!			
Introduction: General presentation of FACTIVE project objectives and results. Presentation of Flipped learning methodology.	<b>On Going:</b> After presenting some case studies, the teachers presented a learning challenge to the class (*see below), participants were divided into 2 groups of 4 people. Each group brainstormed possible solutions and developed a shared idea.	<b>Conclusion</b> : In plenary, each group presented to the others the concept they defined, sharing ideas and comments. After the presentation, opinions about the flipped classroom methodology were shared; reaction/satisfaction evaluation questionnaires were collected.		





#### 2020-1-PT01-KA202-078344

#### Assessment:

Gamified Self-assessment using Kahoot Working in groups and presentations

#### Observations:

The participants were very attentive and very involved in the group work phase. They actively interacted to come up with an effective solution to the learning challenge, making use of all the knowledge gained in the self-study phase.

Each group managed, in the time available, to come up with a complete concept and present it clearly and convincingly to the class.

#### **Plan Support**

It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	To define the case study and plan the lesson according to the trainees profile, the expressed training methodologies preferences and expectations.	To introduce the work, guide the session and answer the questions	To analyse the evaluation questionnaires to understand what worked and what did not
Trainee (T&C Trainee)	Watch the MOOC lessons, deepen the contents with the recommended resources	Brainstorming, select ideas, prototyping and present the work	

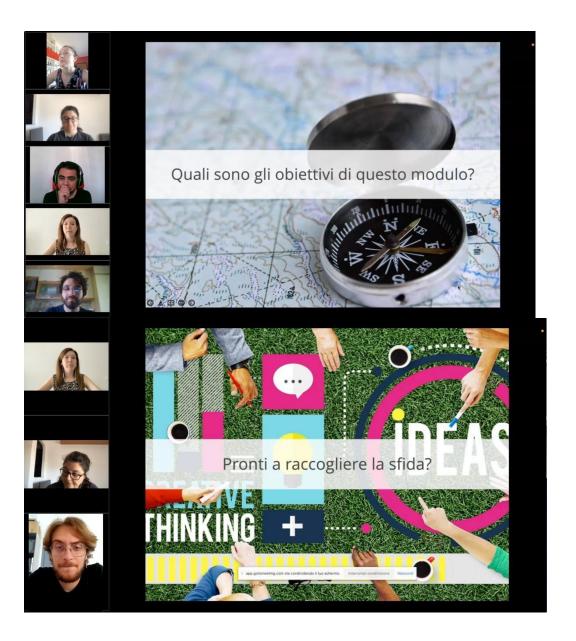


2020-1-PT01-KA202-078344



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

# Evidences











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

# 2020-1-PT01-KA202-078344





FACTIVE

#### 2020-1-PT01-KA202-078344



# Learning Unit 3: Textile & Clothing sustainability - IVOC

#### **FACTIVE Lesson Plan Design (Session 1)**

Date: 20.12.21	Learning L	Jnit No. 3			Session No. 1
Target Audience: Student in fashion education (bachelor level)	workshop	vw.helmo.be/Inst	aration of a live cla itution/Instituts/H		<b>Time:</b> 9.00 – 16.00
fashion Hands-on activities that are useful in the definition of the second se	: ne preparat tion by an e vity by pract cutting and products s: Deepenin evelopment	ion of the xpert in circular ticing d assembling g of the knowled of circular fashio	<ul> <li>Business cas https://www</li> <li>Reusable tes tools and mage ge and principles on items.</li> </ul>	DOC's on MOODLE se v.instagram.com/sl xtile fabrics & other achines for cutting	ow31asbl/ r materials, and assembly
Pedagogical Technique Introduction: Individua in preparation	-	On Going: ex business case	planation of a and concrete a circular textile	<b>Conclusion</b> : integ has been learne fashion education	d into broader
Assessment: Informal only					
external traine <ul> <li>An individual e</li> </ul>	ers, experts) effort is requ	. It is important to uired of the traine	o integrate things a	ctors (project partr and to keep an over used to this. We n inees.	rview.

#### FACTIVE Lesson Plan Design (Session 2)

Date: 24.3.22	Learning Unit No. 3	Session No. 2

D5- Global report on the piloting implementation sessions www.factiveproject.eu 



#### 2020-1-PT01-KA202-078344

Target Audience: Student in fashion education (secondary level)	n workshop			<b>Time:</b> 9.00 – 16.00		
Programmatic Content:       Didactic Resources:         Individual online preparation of the workshop       FACTIVE-MOOC's on MOODLE and on Youther Business case https://www.lagadoueatelier.com/la-gadou         Case presentation by an expert in circular fashion       Reusable textile fabrics & other materials, tools and machines for cutting and assembling circular textile products				om/la-gadoue materials,		
Pedagogical Objectives that are useful in the d	evelopment	of circular fashio	n items.	of circular fashion a	and of the skills	
Pedagogical Technique	s/Activities	: Training, case-st	udy, project work			
Introduction: Individua in preparation	Introduction: Individual training in preparation On Going: explanation of a business case and concrete elaboration of a circular textile product					
Assessment						
Expectations: https://s	Expectations: https://s4tclf.typeform.com/to/Ax5XQ7GB					
Satisfaction: https://s4tclf.typeform.com/to/kyYlxsHK						
Observations:						
• The students were enthusiastic about the workshop, but were not willing to personally testify about their experiences, especially when captured on photo or video. They did agree to a collective testimony, although						







 $\rangle$ 

Page 37 of 58

### 2020-1-PT01-KA202-078344

# FACTIVE Lesson Plan Design (Session 3)

Date: 12.5.22	Learning Unit No. 3			Session No. 3
Target Audience: All interested (Students, trainers, employees)	Session Mode: Online preparent workshop https://sites.google.com/vie			<b>Time:</b> 9.00 – 16.00
workshop Case presenta fashion Hands-on activitechniques for circular textile Pedagogical Objectives	ne preparation of the tion by an expert in circular vity by practicing r cutting and assembling products s: Deepening of the knowled	<ul> <li>Business cas <u>https://www</u></li> <li>Reusable tex tools and m</li> <li>ge and principles of</li> </ul>	DOC's on MOODLE a se <u>v.joseffa.com/</u> xtile fabrics & other achines for cutting	r materials, and assembly
	evelopment of circular fashio es/Activities: Training, case-si			
Introduction: Individuation	al training <b>On Going</b> : ex business case	and concrete a circular textile	<b>Conclusion</b> : integ has been learne fashion education	d into broadei
Assessment				
Expectations: <u>https://fo</u>	orms.gle/tvjpaWWYc5aXEkPT	<u>-9</u>		
Satisfaction: <u>https://for</u>	rms.gle/hLVByBwowU2D6d72	<u>2A</u>		
<b>Observations</b> : The session was plague May was apparently ba	d with many cancellations fro	om participants for	a variety of reason	s. The month o
	Plan S	upport		
It works as a mini d	checklist to guide the Tro		and to guide hi	s Trainees in

their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
-------------------------------	-----------------------------------	---------------------------------------	----------------------------------

www.factiveproject.eu

D5- Global report on the piloting implementation sessions





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

2020-1-PT01-KA202-078344
2020 1 1 101 102 070344

Project partner IVOC-IREC	<ul> <li>Organisation and announcement of the workshop</li> <li>Guidance of the participants</li> <li>Invitation to go through the FACTIVE MOOC</li> </ul>	Guiding the trainees and monitoring the progress of the pilot	Evaluation of the pilot
Partner organisation (school, training center,)	Prepare classroom, provide materials and machines	Logistics & catering	integration of what has been learned into broader fashion education
Expert in circular fashion	<ul> <li>Go through the Factive MOOC, preparation of the case study accordingly,</li> <li>Design of a project work plan with a concrete elaboration of a circular textile product</li> </ul>	Case study presentation and supervision of the project work	Evaluation of the pilot
Trainee (T&C Trainee)	<ul> <li>Make expectations known</li> <li>Go through the Factive MOOC</li> </ul>	Test what has been learned in practice. Learn by actively asking questions	Evaluation of the pilot





2020-1-PT01-KA202-078344



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

# Evidences





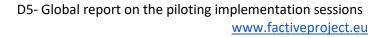








/ \ }





FACTIVE

### 2020-1-PT01-KA202-078344

# Learning Unit 4: Sustainable textile materials - Modatex

# FACTIVE Lesson Plan Design (Session 1)

Date: 11/05/2022	Learning Unit No. 4. Sustainable textile materials	Session No. 1 Apresentação da ação piloto / FACTIVE MOOC
TargetAudience:Formandosque trabalham para a IndústriaSession Mode:PresencialTêxtil		Time: 120'
Programmatic Content:		Didactic Resources:
FACTIVE MOOC		MOOC
Portal Modatex		Portal Modatex
<ul> <li>Avaliação de diagnóstico</li> </ul>		Computador
<ul> <li>Introdução aos temas da ação, palavras chave, sustentabilidade individual e global</li> </ul>		Gamificação

#### **Pedagogical Objectives:**

No final da sessão, os formandos devem ser capazes de assistir aos conteúdos do FACTIVE MOOC e aceder/interagir com o portal Modatex. Devem também ser capazes refletir sobre os temas propostos.

### Pedagogical Techniques/Activities:

Introduction:	On Going:	Conclusion:
Envolver os formandos e apoiá-los no diagnóstico das necessidades de aprendizagem.	Apresentação do projeto, metodologia, plataforma e decorrer da ação. Gamificação acompanhada de perguntas (Método ativo e interrogativo).	Síntese (Método expositivo). Atividades de avaliação (Método Interrogativo).

#### Assessment:

Avaliação Formativa (Níveis de Avaliação da Reação e Aprendizagem).

Questionário de expectativas - O que espera desta formação e o que podemos fazer para ir de encontro às suas expectativas? (Níveis de Avaliação da Reação).

Avaliação adicional da apresentação de cada grupo de pares (trabalho de casa para apresentação na próxima sessão) - escalas de observação - (Níveis de avaliação da aprendizagem e do comportamento).

**Observations**: As tarefas solicitadas no final da sessão já estão definidas pelo Formador e serão partilhadas durante a sessão e simultaneamente no Portal Modatex. Nesta sessão são incluídas atividades pedagógicas "atividades em sala de aula" para debate de ideias sobre os temas da ação.





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

### 2020-1-PT01-KA202-078344

# **Plan Support**

# It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	Preparou os recursos de aprendizagem necessários, bem como os instrumentos de avaliação e pô-los à disposição. Organizou toda a informação que possui sobre o perfil dos formandos e do curso.	Dinamiza as atividades pedagógicas planeadas. Orienta os formandos para a realização das atividades pedagógicas. Promove momentos de Feedback. Encoraja a auto-iniciativa e a investigação. Tutoria.	Fornece orientação para tarefas pós- escolares. Prepara a sessão seguinte.
Trainee (T&C Trainee)	Criou expectativas / questões acerca dos temas da ação.	Faz anotações. Colabora em Atividades Pedagógicas. Partilha experiências e perguntas. Promove a reflexão e realiza perguntas.	Prepara e partilha ideias. Organiza tarefas e recursos. Pesquisa. Organiza, processa e compila informação. Estuda. Prepara a apresentação do trabalho de grupo e cria perguntas para ficha de avaliação.





### 2020-1-PT01-KA202-078344

## FACTIVE Lesson Plan Design (Session 2)

Date: 12 a 17/05/2022	Learning Unit No. 4. Sustainable textile materials	Session No. 2 Elaboração do trabalho de grupo e das perguntas para ficha de avaliação
TargetAudience:FormandosSession Mode: auto estudoque trabalham para a Indústria(elearning)Têxtil		<b>Time</b> : 300'
Programmatic Content:		Didactic Resources:
FACTIVE MOOC		MOOC
Portal Modatex		Portal Modatex
Trabalho de grupo		Computador
<ul> <li>Criar perguntas sobre o tema do trabalho</li> </ul>		Gamificação

#### **Pedagogical Objectives:**

No final da sessão, os formandos devem ser capazes de assistir aos conteúdos do FACTIVE MOOC e aceder/interagir com o portal Modatex. Devem ser capazes também de, em auto estudo, elaborar um trabalho sobre a fibra(s) e suas características sustentáveis, certificação e reaproveitamento de materiais / desperdícios.

#### Pedagogical Techniques/Activities:

Introduction:	On Going:	Conclusion:
Envolver os formandos e	Acompanhar o	Dar feedback acerca dos prazos
apoiá-los no	desenvolvimento do	de entrega, trabalhos e
desenvolvimento das suas	trabalho de grupo.	perguntas.
atividades de grupo e	Acompanhar, sugerir e	
aprendizagem.	organizar as perguntas para	
	integrar a ficha de avaliação.	

#### Assessment:

Avaliação adicional da apresentação de cada grupo de pares (trabalho de casa para apresentação na próxima sessão) - escalas de observação - (Níveis de avaliação da aprendizagem e do comportamento).

#### **Observations**:

As tarefas solicitadas pelo Formador têm prazos de entrega no Portal Modatex para comprometimento / envolvimento doa formandos nas tarefas e constante interação com o formador. Nesta sessão são incluídas atividades pedagógicas "atividades em autoestudo" para aprendizagem de todo o grupo e debate de ideias sobre os temas da ação.

# **Plan Support**

It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

D5- Global report on the piloting implementation sessions www.factiveproject.eu





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

### 2020-1-PT01-KA202-078344

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	Organizou e orientou toda a informação / prazos de entrega, recolha e avaliação do tema, realização do trabalho de grupo e elaboração de perguntas.	Orienta os formandos para a realização das atividades pedagógicas. Promove momentos de Feedback. Encoraja a auto-iniciativa e a investigação. Tutoria.	Fornece orientação para apresentação. Prepara a sessão seguinte.
Trainee (T&C Trainee)	Criou o grupo e escolheram o tema do trabalho de grupo.	Faz anotações. Pesquisa. Organiza, processa e compila informação. Estuda. Colabora em Atividades Pedagógicas de autoestudo e de grupo. Partilha experiências e perguntas. Promove a reflexão e realiza perguntas.	Prepara e partilha ideias. Organiza tarefas e recursos. Prepara a apresentação do trabalho de grupo.

 $\rangle$ 





# FACTIVE Lesson Plan Design (Session 3)

Date: 18/05/2022	Learning Unit No. 4. Sustainable textile materials	Session No. 3 - Apresentação de trabalhos de grupo, Ficha de avaliação e avaliação da ação
Target Audience:FormandosSession Mode: Presencialque trabalham para a IndústriaTêxtil		Time: 180'
Programmatic Content:		Didactic Resources:
Fibras têxteis e a sua sustentabilidade		Fibras têxteis
<ul> <li>Certificação das fibras têxteis</li> </ul>		Computador
Reaproveitamento de materiais residuais		Gamificação
		Portal Modatex

### **Pedagogical Objectives:**

Na sessão presencial, os formandos devem ser capazes de em pequenos grupos apresentar exemplos de caraterísticas que tornam as fibras têxteis sustentáveis, certificação das mesmas e reaproveitamento dos artigos /desperdícios referindo aspetos económicos, ambientais e sociais sustentáveis.

### Pedagogical Techniques/Activities:

Introduction:	On Going:	Conclusion:
Envolver os formandos e	Breve análise dos casos de	Síntese (Método expositivo).
apoiá-los nas necessidades	estudo apresentados	Atividades de avaliação (Método
de aprendizagem.	(Método Ativo).	Interrogativo).

#### Assessment:

Avaliação Formativa (Níveis de Avaliação da Reação e Aprendizagem).

Teste de avaliação da aprendizagem elaborado das perguntas criadas pelos grupos de trabalho - (Nível de Avaliação da Aprendizagem).

Questionário de satisfação da sessão - O que mais lhe agradou e o que podemos fazer melhor? (Níveis de Avaliação da Reação).

### **Observations**:

Nesta sessão são incluídas atividades pedagógicas (atividades em sala de aula) como apresentação dos trabalhos de grupo e realização da ficha de avaliação que deriva das perguntas criadas pelos grupos de trabalho (atividades criadas em casa).





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

### 2020-1-PT01-KA202-078344

# **Plan Support**

# It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	Preparou os recursos de aprendizagem necessários, bem como os instrumentos de avaliação e pô-los à disposição. Organizou toda a informação que possui sobre o perfil dos formandos e do curso.	Dinamiza as atividades pedagógicas planeadas. Orienta os formandos para a realização das atividades pedagógicas. Promove momentos de Feedback. Encoraja a auto-iniciativa e a investigação. Tutoria.	- II - IN
Trainee (T&C Trainee)	Assistiu à sessão gravada. Fez anotações da gravação e imagens. Em pequenos grupos trabalham tendo por base os temas escolhidos, elaboram apresentação e criam perguntas para integrar a ficha de avaliação.	Faz anotações. Colabora em Atividades Pedagógicas. Partilha experiências e perguntas. Apresenta os trabalhos de casa. Promove a reflexão e realiza perguntas. Responde a ficha de avaliação elaborada das perguntas criadas pelos grupos.	Organiza, processa e compila informação. Procura novidades sobre os temas.

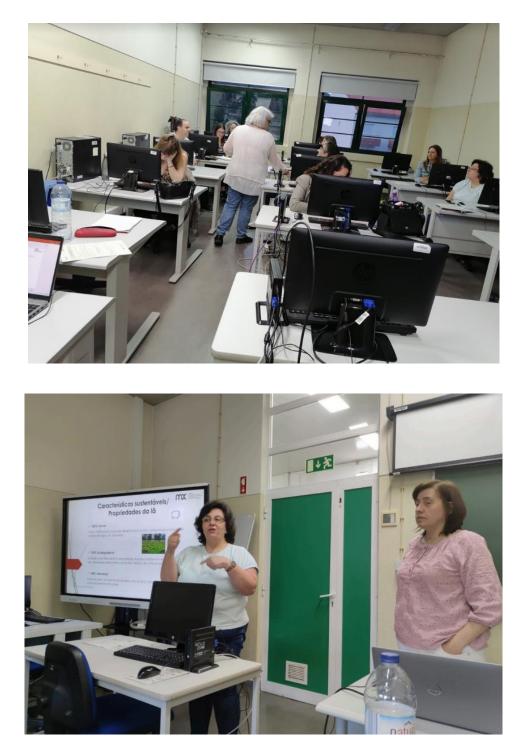


2020-1-PT01-KA202-078344



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

# Evidences





D5- Global report on the piloting implementation sessions www.factiveproject.eu



FACTIVE

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

### 2020-1-PT01-KA202-078344

# Learning Unit 5: Process and new technologies- AEI Tèxtils

# FACTIVE Lesson Plan Design (Session 1)

Date: 10/03/2022	Date: 10/03/2022         Learning Unit No. #5			
Target Audience: VET students	Session Mode: in person	Time: 1h		
Programmatic Content:	Didactic Resources:			
- Who are we?	PowerPoint presentation, Kahoot!			
- What is FACTIVE proj				
- Situation of the texti	le industry			
<ul> <li>What a flipped classr</li> </ul>	oom is?			
- Content and work fo	r the next session			
Pedagogical Objectives:				
- Let the students know	w the current situation of the t	extile industry. Motivation.		
<ul> <li>Understand the flipp</li> </ul>	ed classroom methodology.			
<ul> <li>Pedagogical Techniques/Activities:</li> <li>Classical presentation (PowerPoint).</li> <li>Quiz about what a flipped classroom is (Kahoot!)</li> </ul>				
Introduction:	On Going:	Conclusion:		
The students present themselves, and we also explain who we are and what we do.Contextualization (Factive, current textile industry situation). Explanation about what a flipped classroom is.		Work for the next session.		
Assessment:				
No assessment in this session.				
Observations:				
Although this content was not specifically textile, we thought it was important to detail what the project is about and what a flipped classroom is, so the students felt more motivated, knowing what they were				

doing during the sessions.

D5- Global report on the piloting implementation sessions www.factiveproject.eu





### 2020-1-PT01-KA202-078344

# **Plan Support**

It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	Organize both sessions in general. Plan specifically the first session. Prepare the material (presentation, test).	Present the material we have prepared.	Plan the next session according to the first session experience.
Trainee (T&C Trainee)	-	Listen and understand	Watch Lesson 5 videos. Take notes, make a resume of the content of the videos. Write the questions in order to be able to ask them during the next session.







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

### 2020-1-PT01-KA202-078344

# FACTIVE Lesson Plan Design (Session 2)

Date: 30/03/2022	Date: 30/03/2022 Learning Unit No. #5	
Target Audience: VET students	Session Mode: in person	Time: 1h
Programmatic Content:		Didactic Resources:
<u>1<sup>st</sup> part</u>		- Questions (Mentimeter)
- Split the group in two		
- Each group has to resume the 3 videos they have seen, using their notes.		
- Three persons per group exp	plain the videos (3min per video).	
- Personalised Q&A about the	content of the videos.	
2 <sup>nd</sup> part		
- Debate about the flipped cla	ssroom methodology. Opinion.	
- Fill the forms.		
Pedagogical Objectives:		
Understand the content of the v	videos.	
Pedagogical Techniques/Activit	ies:	
- Debate		
- Q&A		
- Oral presentation		
- Resume		
Introduction:	On Going:	Conclusion:
First impressions about the videos they have seen. The group is divided in two. Each group check their notes and prepare a resume of each video. 20min after, one person presents each video (3min per resume).		Opinion about the flipped classroom methodology.
Assessment: Resumes /present	ations.	
Observations:		





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

2020-1-PT01-KA202-078344

# **Plan Support**

It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.

Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)
Trainer	Prepare the session according to last day considerations.	Organize, guide the session. Answer questions.	Considerations for next time.
Trainee (T&C Trainee)	Watch the videos, take notes to prepare a resume and prepare questions.	Prepare a resume.	-





FACTIVE



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

# 2020-1-PT01-KA202-078344

# Evidences





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

# 2020-1-PT01-KA202-078344

# Learning Unit 6: Environmental social governance - Ins. Terrassa

# FACTIVE Lesson Plan Design (Session 1)

Date: 20/04/2022	Learning Unit No. 6	Session No. 1		
Target Audience: VET students         Session Mode: classroom		Time: 60 minutes		
<ul> <li>Programmatic Content:</li> <li>The environmental impapproaches</li> <li>The social impact of approaches</li> <li>An overview to the mpolicies for a better environmental impact of a circularity</li> </ul>	Didactic Resources: MOOC Digital Blackboard			
<ul> <li>Pedagogical Objectives:</li> <li>Identify the problems of the textile and fashion industry</li> <li>Generate interest in the new topic/unit</li> <li>Understand the dynamics of the Factive MOOC</li> <li>Think and be aware of the previous knowledge on this topic</li> </ul>				
Pedagogical Techniques/Activities:Introduction:On Going:Conclusion:The class watches a video about the downside of fashion and the cost of fast fashion.Each student individually completes the thinking routine "See, Think, Wonder" worksheet.Summary of all the items written in the shared thinking routine.Focus on what we need to know 				
Assessment surveys on the Factive MOOC moodle				

# Observations:

The thinking routine worksheet will be collected and given to each student at the end of the second session, so that they are aware of everything they have learnt during this time.





# 2020-1-PT01-KA202-078344

Plan Support						
It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.						
Who Does What and When?	Before Class (Home Activities)	During Class (In-Class Activities)	After Class (Home Activities)			
Trainer	Prepare and organise the lessons of unit 6	Streamline the planned pedagogical activities. Guide the trainees to carry out the pedagogical activities. Promote Feedback moments. Tutoring.	Prepare for the next lesson.			
Trainee (T&C Trainee)	_	Take notes. Collaborates in Pedagogical Activities. Share Experiences and Questions. Promote reflection among themselves/form questions.	Watch the videos of unit 6 of the MOOC			





FACTIVE



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

### 2020-1-PT01-KA202-078344

# FACTIVE Lesson Plan Design (Session 2)

Date: 20/04/2022	Learning Unit No. 6	Session No. 2		
Target Audience: VET Students	Session Mode: Classroom	Time: 60 minutes		
<ul> <li>Programmatic Content:</li> <li>The environmental impapproaches</li> <li>The social impact of approaches</li> <li>An overview to the mpolicies for a better environmental impact of a circularity</li> </ul>	Didactic Resources: MOOC Digital Blackboard Coloured papers (red, green and blue) Textile and sustainability news items printed on paper			
Pedagogical Objectives:         -       Identify the problems of the textile and fashion industry         -       Generate interest in the new topic/unit         -       Understand the dynamics of the Factive MOOC         -       Think and be aware of the previous knowledge on this topic				
Introduction: On Going: Conclusion:				
	-			
Introduction: Feedback from unit 6 visualised in the MOOC	On Going: Students will be separated into groups of 2-3. They will be presented with different news and statistics related to topic 6 of the MOOC. In addition, red, green and blue paper will be available for the pupils. With the red ones they will mark what is wrong with the news/situation/statistics they have (red flag). With the green one they will point out the positive and with the blue one they will propose improvements (certifications, company policies, solutions to circularity, etc.).	Summary		
Feedback from unit 6	Students will be separated into groups of 2-3. They will be presented with different news and statistics related to topic 6 of the MOOC. In addition, red, green and blue paper will be available for the pupils. With the red ones they will mark what is wrong with the news/situation/statistics they have (red flag). With the green one they will point out the positive and with the blue one they will propose improvements (certifications, company policies, solutions to	Summary Explanation of the assessment activities		

Students will read the thinking routine they did in lesson 1 to be aware of all the things they have learned.

 $\rangle$ 



FACTIVE



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

# 2020-1-PT01-KA202-078344

Plan Support				
It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.				
Who Does What and When?	Before ClassDuring Class(Home Activities)(In-Class Activities)		After Class (Home Activities)	
Trainer	Prepared the required learning resources and made them available, as well the assessment instruments.	Streamlines the planned pedagogical activities. Guides the trainees to carry out the pedagogical activities. Promotes Feedback moments. Tutoring.		
Trainee (T&C Trainee)	Watch the recorded lesson.			

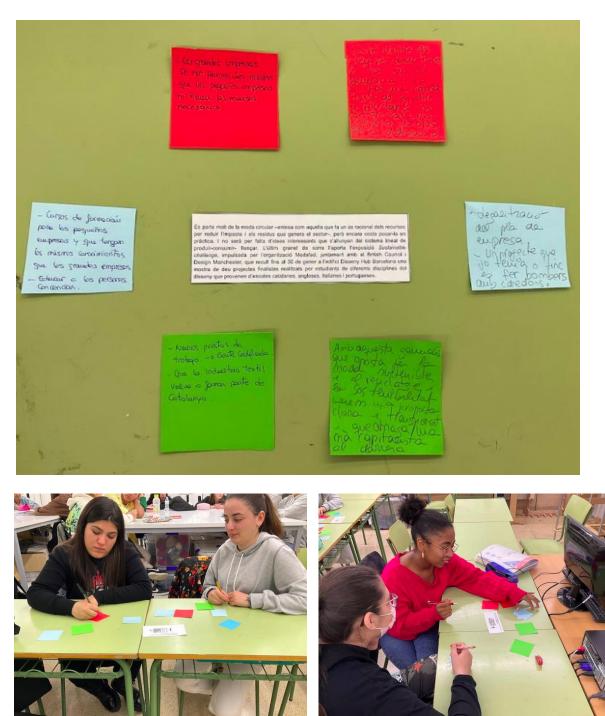


2020-1-PT01-KA202-078344



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

### Evidences







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

### 2020-1-PT01-KA202-078344

# Learning Unit 7: Design for circularity - Cre Thi Dev

# FACTIVE Lesson Plan Design (Session 1)

Date: 08/06/2022	Learning Unit No. 7	Session No. 1
<b>Target Audience</b> : Universi students	ty Session Mode: live	<b>Time</b> : 12:00-15:00
Programmatic Content:		Didactic <u>Resources:\</u>
Session 1		Unit 7
<ul> <li>Discuss about Unit 7 – talk about previous knowledge on eco design and advanced textiles</li> <li>Share 2 videos with class</li> <li>Assign them with product design based on the two videos presented (40 mins given time) – Outdoor activities company</li> </ul>		Youtube video x2 Questions using cards
Discuss results and ideas		
Session 2		
<ul> <li>Q&amp;A based on the flipped c</li> <li>Presentation of gamification</li> <li>Debate about tools such as</li> <li>Fill the documents</li> </ul>	1	
Pedagogical Objectives:		
Triggering students' o	creativity through the two video	IS
Pedagogical Techniques/Activit	ies:	
Discussion		
Knowledge share		
Oral presentation		
Videos		
Introduction:	On Going:	Conclusion:
Getting to know each other. Asking students what they study, what they want to do with their studies and moving on to who we are, and what FACTIVE is about.	Presenting the methodology of FACTIVE and explaining its purpose. Discuss it with students. Showing the videos for their exercise after discussing the material from Unit 7. Dividing them in groups to work on assignment.	Discussing the findings of the students of their assignment. Discussing the videos and how much or not helped them in the understanding of the assignment. Discussion about gamification and how it can be implemented in the assignment.

 $\langle$ 



2020-1-PT01-KA202-078344



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

# Evidences









### 2020-1-PT01-KA202-078344

### Learning Unit 8: New business models - Citeve

# FACTIVE Lesson Plan Design (Session 1 & 2)

### FACTIVE Lesson Plan Design

Date: 26/04/2022	Learning Unit No. 8	Session No.
13/05/2022		1. Fast fashion vs Slow fashion
		2. Repair, resale and renting
		3. Circular business models
		4. Circular start-ups, green supply chain
Target Audience: students a T&C workers	nd Session Mode: b-learning	Time: 4h + 2h30m
Programmatic Content:		Didactic Resources:
Fast fashion vs Slow fashion – d	efinitions.	MOOC
The fashion industry of today.		Digital tools: kaboot, Miro
Rental clothes models.		Life-cycle Assessment - Principles
The fashion industry of the futu	re.	and Guidelines Document
Linear economy vs circular ecor	iomy.	
Principles of circular economy.		
Pros and cons of a circular fashi	on economy.	
Fashion supply chain.		
Circular start-ups.		
Pedagogical Objectives:		
At the end of the session the tra	inees should be able to:	
- Identify the main characteristi	cs of slow fashion and fast fashion.	
- Enunciate the 3 principles of t	ne circular economy can be applied	to the fashion industry.
- Identify the principles that sho	uld underlie the new-age business	models of the apparel industry.
- Characterize and differentiate	linear economy and circular econo	my.
- Identify the different steps of	the circular fashion wheel.	
- Name the three powerful inno	vation trends.	
- Identify fashion supply chain.		
As a final result, they should be	able to:	
Design a value chain for the pro	duct "cotton t-shirt" (assuming a lir	near economy)
	n for the same product (assuming a	
Pedagogical Techniques/Activit	ties:	
Introduction:	On Going:	Conclusion:
Group presentation and	Explanation of the session	Groups' presentations.
introduction to the FACTIVE	contents (Expositive Method)	Session Overview.
	Top case studies and research	

D5- G



# FACTIVE



review the videos and

knowledge,

Deepen

activities.

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

### 2020-1-PT01-KA202-078344

	through active nwriting, Miro). rvey.	(Active Meth Discussion (Inte Active Methods); Teamwork.	-	Satisfaction	survey
Assessment: Short quiz through Kahoot! – Learning Assessment Level. Oral questions - Diagnostic Assessment – (Reaction and Learning Assessment Levels). MOOC quiz. Project work and presentations.					
Observations: Two face-to-face sessions were held with a two-week spacing between them. In the first session, a presentation of the methodology was made using practical group dynamics. The learning platform was presented and the work to be developed at home was explained. The trainees followed the MOOC, viewing the 4 videos of module 8 and took the quiz. In terms of work, they were asked to design two value chains based on the assumptions of linear economy and circular economy. In the second face-to-face session, trainees presented their work and the trainer clarified doubts and reviewed all the contents.					
<b>Plan Support</b> It works as a mini checklist to guide the Trainer in his work and to guide his Trainees in their tasks.					
Who Does What and When?Before ClassDuring ClassAfter ClassWhen?(Home Activities)(In-Class Activities)(Home Activities)					
Trainer	Preparation (attendance list,	of resources PPT, dynamics)	Support in activities. Clarification of	practical doubts.	Orientation and clarification of doubts.

Watch the recorded lesson.

Trainee

(T&C Trainee) Participated

discussion.

in

practical activities and

the





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

# 2020-1-PT01-KA202-078344

# Evidences















D5- Global report on the piloting implementation sessions www.factiveproject.eu Page 61 of 58





# Pilot planning

Venue: ZMŠT Trbovlje

Agenda:

- 09.00 09.30 Presentation of FACTIVE project
- 09.30 11.00 Presentation of MOOC and Module 9 projekta FACTIVE (World caffe)
- 11.00 11.15 Break
- 11.15 12.45 Workshop on sustainability in the textile industry
- 12.45 13.00 Evaluation (questionnaire, participant list, video recording)





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

# 2020-1-PT01-KA202-078344

# Evidences









<





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

### 2020-1-PT01-KA202-078344

# ERASMUS +

KA2 – Cooperation for innovation and the exchange of good practice KA202 - Strategic Partnerships for vocational education and training Grant Agreement: 2020-1-PT01-KA202-078344

Project duration:

01<sup>st</sup> October 2020 – 30<sup>th</sup> September 2021

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

© 2020-2022 FACTIVE Consortium Partners. All rights reserved. All trademarks and other rights on third party products mentioned in this document are acknowledged and owned by the respective holders.

# PARTNERS



