

## Project Planning

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## ERASMUS+ and VET

Erasmus+ is not only about student exchanges, is about improving teaching and learning methods, and it is in this option that VETCREA is included, to capacity building in Vocational Education and Training field.

VET provides learners with essential skills that develop their employability skills, supporting their personal development and encouraging active citizenship. It promotes enterprise performance, competitiveness, research, and innovation.

Technology is fundamentally changing how we teach and learn, making it more engaging but also challenging. Vocational Education and Training faces major challenges including youth unemployment; workers skills updating for new technologies such as AI, automation, and Green Economy.

VET overall aim is to develop a series of resources for trainers' professional development for effective digital, open, and innovative education and pedagogies.

## VETCREA Goals

VETCREA overall aim is to promote creativity stimulated in and through VET. We believe that it can be achieved through working on and reaching for the following specific objectives:

- Increase awareness on "green issues" and on "green" competences of the VET key actors.
- Think and collaborate "out of the box";
- Increase marketing competences of VET key actors.

## Activities

1. Working towards a showcase via Eco-friendly design and development.
2. Working towards a showcase via recycled design and development.
3. Working towards a showcase via recycled the recycled design and development.
4. Teaching Support Materials development.
5. Marketing and dissemination.
6. Management.

## Showcases - Dynamics and Concepts

### 1<sup>st</sup> Showcase

Eco-friendly design and development – Focused on prioritising and dignifying sustainable, organic and local raw materials.

### 2<sup>nd</sup> Showcase

Recycled design and development - Focused on recycling materials, by reconditioning them or using recycled materials in their composition.

### 3<sup>rd</sup> Showcase

Recycle the recycled design and development – Transforming and deconstructing the recycled products conceded in the previous stage to make new ones.

## Green Awareness

Environmental awareness is to understand the environment questions, the impacts of human behaviours on it, and the importance of its protection.

Environmentalism is an ideology that evokes the necessity and responsibility to respect, protect, and preserve the natural world. By spreading awareness to others that the physical environment is indispensable, we can prevent and fix the issues that threaten it, oil drilling and deforestation being some of them.

### How do you, as students, experience Green Awareness?

We are constantly updating on environmental and social state of the planet, through the media and social networks.

It is necessary and extremely important to keep in mind its logistics and principles for all school projects development. This implies the knowledge and study of more ecological materials and practices various vocational areas.

We suggest exploring various contents, at environmental, social and economic levels, restricting to the dynamics study of their own country, or even their residence area or school, trying to find out about their failures and the resulting initiatives that intend to counteract them. Participating in activities like these to promote their knowledge and instigate it to those around them.

To promote Sustainability, Green Awareness and Recycling, the project focuses on integrating a set of notions and behaviours that promote this ideology.

Giving priority to:

- Sustainable materials.
- Local raw materials and craft techniques.
- Reuse wastage techniques.
- Reduce wastage techniques.
- Garments adaptability.
- Reuse hair, folies.
- Use eco-friendly products.
- Use water efficient taps.

## Creativity Care

### Inspirations and working procedures.

Starting with a previously created concept, the inspiration process begins as we work to find a design that best reflects the theme addressed. This research is conducted by:

- Looking at trends for hair and makeup on the internet.
- Attend workshops.
- Drawing inspiration from physical and digital environments,
- Exploring social networks and seeking diverse content in various areas.
- Collaborate with Peers
- Exploring various approaches of products that can be used.
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### Materials – study and research

To adopt a sustainable approach, it's essential to:

- Search for companies that produce green products for hair and makeup.
- Look at classes in school for fake hair that can be reused or materials that can be reused.

## Methods Implementation

### In HAIR design

- Create a Mood Board: digital mood board with images, color, and styles that inspires.
- Practice on training heads for styling sessions to experiment with various hair textures, lengths, and styles.
- Reusing of fake hair from previous hair designs.
- Take pictures to see progress and faults.

### In MAKE-UP design

- Create a Mood Board: digital mood board with images, colours, and styles that inspires.
- Practice on students for make-up sessions to experiment with various design and colours.
- Take pictures to see progress and faults.

Some of the applied technologies are:

- CANVA

Canva" is a graphic design platform that allows users to create a wide range of visual content, including social media graphics, presentations, posters, documents, and other visual materials. It provides a user-friendly interface with various templates, design elements, and customization options, making it accessible for individuals without extensive design experience. Canva is widely used for personal, educational, and business purposes to create visually appealing and professional-looking graphics.

- LAB

LAB" likely refers to a learning or training laboratory. Pivot Point is a global provider of education and training for the beauty industry, particularly in the field of cosmetology and hairdressing. The LAB may be a designated space or program where students can engage in hands-on learning, practical exercises, and experiments related to hairstyling, cutting, coloring, or other beauty industry skills. It's a place where students can apply theoretical knowledge in a practical and interactive setting, enhancing their skills and understanding of the craft.

- PAINT

Paint" refers to a software program or application that allows users to create and edit digital images. Microsoft Paint, often simply called Paint, is a basic graphics painting program that comes pre-installed on many Windows operating systems. It provides fundamental tools for drawing, colouring, and editing images. Users can create simple drawings, add text, and manipulate images using features such as brush tools, fill options, and various shapes.

While Microsoft Paint is a straightforward application, it can be a useful tool for basic graphic design and image editing tasks.

## Creativity Fashion

### Inspirations and working procedures.

From a concept previously drawn up, inspiration process begins working towards finding a language that best reflects the theme addressed.

We carry out this research by:

- looking at trends in fashion magazines.
- browsing on the internet.
- visiting local exhibitions.
- analysing the "environment" and resources that surround us, by walking through the streets, going to cafés, during the day and at night, visiting museums, airports, among others. Taking inspiration from physical environments, but also from digital environments, browsing social networks, looking for different content in different areas of individual interest, which will be manifested in different inspirations and knowledge.
- studying different ways of conceiving products, preserving the inherent qualities of the materials, by adapting it to its own nature. In other words, when using a material such as burel, a Portuguese woollen fabric, we must consider its density and warmth characteristics, recognising the best techniques for working with the material and the type of products that are not recommended for producing - in this case, a T-shirt would be impressive as the fabric does not have the properties sought in this product.
- use materials resistant to the diverse weather conditions so they have a "longer life" and utility. Taking burel again as an example, this material, when applied to shoes and bags, makes them very durable and comfortable in cold conditions.
- avoid trims use, turn them versatile, by making them double-sided, customizable.

### Materials - Study and Research

To follow a sustainable path, it is necessary to:

- Recognise regional/local materials. Reading regional or national magazines. In Portugal, municipalities provide magazines and articles that publicise local products and services, or through their websites

that provides information about the history of the region, its traditions, customs, craft techniques and locally produced products.

- Establish contact with companies in order to collect their wastage.
- Establish contact with companies that supply recycled or organic materials.

## Methods Implementation

In accessories, like Purse, earrings and necklace

- Reuse of leftover cork - organic material and local/national production.
- The use of organic cotton yarns.
- Reuse of waste trims - buttons and pearls.

## In Garment

- Partnership with local companies operating in which industry, in fashion design, for example: crafting smart jersey fabrics and developing sustainable strategies along the entire supply chain – fabrics selection that contain recycled fibres.
- Reusing these fabrics for the end-of-year project collections.
- Reuse of waste trims - buttons and pearls.
- Versatility of the garments.

Applied to the textile, design and fashion production sectors, there has been a progressive adoption of technological methods that allow the creation and development process to have less of a detrimental impact at the *Environmental*, Social and Economic sectors.

Some of the applied technologies are:

- **3D Clothing Technology**

The fashion industry generated millions of tonnes of fabric wastes and green- house gas emissions each year. 3D technology can play a strong role in solving the fashion waste problem.

By using virtual try-on function of digital fashion design, designers and pattern makers can find problems that cannot be detected in 2D pattern making process. Unlike flat sewing patterns, 3D fashion design allows real-time virtual fitting. Designers can simulate the draping behaviour of 3D cloth patterns and create animation. Such process can give you a direct

view of how your designs work in the real world on virtual figures and eliminates the need for persons to be physically present for every fitting.

In traditional pattern making, garment samples are made up to three to five times in average during the apparel development process, which caused billions of tonnes of carbon footprint every year. Digital fashion design is a perfect solution to reduce wastes. With the use of 3D pattern making, no waste samples were produced, as physical prototype will only be created until the virtual image and design ideas align. 3D clothing manufacturing does not need any paper pattern, which means less energy being used during the product development and saving resources for our planet.

#### – **Zero-Waste Pattern Making**

Zero waste pattern making is defined as a technique or method for creating patterns without any wasted textile fabric. We can say the process of altering a pattern so that no fabric is left unused. This special method brings sustainability into the initial stage of apparel product development by integrating pattern cutting into the design process.

By not disposing of textiles or clothing, you can reduce environmental pollution. One method is to create garment patterns that produce "zero waste", or no leftover fabric. The number of outfits purchased and the amount of fabric waste from the sewing process may both be decreased by using this clothing template, which is undoubtedly simple to make and construct even for regular people.

## Communication/multimedia area contribution

The multimedia area plays a crucial role on the promotion and contribution towards sustainability of the VETCREA project in several ways.

On a marketing level, it is through the creation of multimedia content that we're able to highlight the sustainable initiatives implemented by the fashion team, such as the adoption of craft techniques and reusing waste materials, among others.

All the recorded initiatives are also documented, with which we're able to build an audio-visual archive for the project.



The use of the created social media channels is not only limited to the sharing of the developments of the project (mainly, but the results also showcased by the fashion team). It is also a powerful tool through which we can share awareness on specific issues that are closely related to multimedia technologies.

Some of the issues that we've been actively searching about can be summarized in the following topics:

- Sustainable maintenance practices for equipment such as batteries and other electronic devices: going through the entire cycle of a battery, that is, using it from its full capacity until it reaches 0%, reduces its lifespan. By adopting practices such as setting up the device not to charge up to its full capacity and turning it off before it runs out of charge, we'll be able to expand its lifespan, and avoid it becoming electronic waste.
- The social and environmental impact of click-farms and e-waste, such as bots and redundant information on social media: all the data we produce and store online must be stored on physical servers, which produces relevant emissions of CO<sub>2</sub>. To reduce the load, we put on them as users, we must carefully organise our data online and delete anything that isn't needed anymore. Click-farms, which are characterised as a large group of devices organized to artificially increase the number of views, likes and interactions on social media are also harmful for the reasons explained on the previous topic. Bots also fall on this category, as they increase the amount of data that needs to be stored on servers.
- The negative impacts and consequences of planned obsolescence: a common practice on today's electronic market is to produce devices that are specifically designed to break down and need replacement after an artificially low amount of time, to generate more revenue and available jobs to the company. The disposed material ends up as e-waste.
- The positive impact of efficient online content management: These practises are common and present a threat to a sustainable multimedia activity. The idea is to design and share small posts for Instagram and Facebook with some of the key arguments on these topics to raise awareness on these issues and educate people on how to avoid them.

## Behaviour - Mentality and Reproduction/Replication

Emphasize this concern in the reformulation of courses. Stipulating the integration of sustainability practices into projects as a crucial part of their assessment.

When it comes to presenting content in class, approach the issue from a wide range of perspectives: environmental, social, and economic. More than looking for ecological materials or upcycling, we need to look at sustainability from the point of view of circular design, thinking that everything we produce will never really end!

The question of the water footprint of a process or garment, on the other hand, is a complex issue that involves various calculations that are beyond the control of the average consumer. You must look at it from a "mathematical" or "quantifiable" point of view, but as creative agents, it's more important to have the ability to translate this into information that is easy to understand, offering appealing alternatives to the consumer and educating them.

## Think Globally and act Locally.

### Volunteer

As a student, one of the most meaningful ways to promote sustainability is by becoming a volunteer for environmental causes. Various social media platforms like Facebook, Meetup, Twitter, Instagram, etc have forums and individuals who need volunteers to perform these environmental initiatives.

Based on your interest, location, and skills, you can become part of them. A few of the common volunteering activities for students are beach clean-ups, plantation drives, litter clean-ups on roads and public spaces, promoting environmental messages, etc.

Advantage of this activity: Through these activities, you can share your knowledge and learn from experts and fellow volunteers. Considering the activity is performed in a group, there will be a tangible impact as well at the end of the session.

If you are a student of STEM (Science, technology, engineering, and mathematics), it is valuable if you integrate your acquired knowledge with practical experience while at the same time benefiting the environment.

## Science Projects

You can do it individually or form small groups to develop projects that align with the green sector. For instance, on a small scale, you can replicate some already-known techniques to observe the impact, such as creating hair sausages to absorb oil in the sea or making yarn from hair and perhaps even knitting a sweater.

You can power a device using solar or wind energy, create a sustainable mobility device, develop a product that supports waste management, find a solution to address biodiversity challenges, and so on. For any clarifications on these projects, you can seek help from your teachers, field experts, and even utilize resources like YouTube.

Benefits of this activity: Practical projects aid in translating theoretical learning into practice, enhancing your fundamentals. Moreover, since you undertake these projects voluntarily, it becomes enjoyable, engaging, and free of any pressure

## Webography

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