



# D6.2. CREATION AND DELIVERY OF RUN-EU PILOT SAPS

(May 2022)

(Polytechnic of Cávado and Ave)





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## 1. Brief Introduction

RUN-EU accomplished the objective to deliver 8 Pilot RUN-EU Short Advanced Programmes (SAPs) during the 1<sup>st</sup> year of activity, despite the exceptional circumstances originated by the pandemic.

The pilot SAPs fulfilled their mission of allowing experimentation and providing a sound-based ground work for the elaboration of the Standard Guidelines for RUN-EU SAPs, which have been defined and fine-tuned along their joint development, preparation and delivery. The difficulties encountered, experience gained and lessons learned with the 8 Pilot SAPs were captured and fully taken into account in this very important initial phase.

Physical Mobility represents a challenge and adds complexity to the organization of these short and small learning units. The difficulties encountered are related to preparation and organization conditions, Visa issues, COVID, overlapping duties, lack of financing, among others. However, it became, whenever applicable, the highlight moment of our learners' journey and proved to be one distinctive feature of utmost relevance.

The 8 Pilot RUN-EU SAPs are shortly described in the next sections.

Due to the merge of the Athlone Institute of Technology (AIT) and the Limerick Institute of Technology (LIT) into the new Technological University of the Shannon: Midlands and Midwest (TUS), and the correspondent transition phase, there are some inconsistencies when referring to these institutions.



# 2. Design Expedition: Emotional Intelligence Meets Artificial Intelligence in Business Design

Joint Coordination: Häme University of Applied Sciences, HAMK

Polytechnic of Cávado and Ave, IPCA

**Date**: 4-15 February, 2021

**Objective:** To offer an experimental learning journey to emotions and artificial intelligence during an intensive online workshop. Open to all RUN-EU students from any level of studies, to be grouped in multidisciplinary and multicultural teams. The Challenge is to create a solution for the interactive future customer experience of a grocery store visitor. Participants must create a solution which encompasses the possibilities connected but not limited to Computer Vision, Emotional Intelligence and Artificial Intelligence Applications.

**Learning Outcomes**: at the end of this RUN-EU SAP students are able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving combined business design, emotional intelligence and artificial intelligence learning challenges;
- 2. Work in multidisciplinary, multicultural and co-creation environments;
- 3. Communicate information, ideas, problems and solutions to both specialist and nonspecialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.



#### **FACTS and FIGURES**

- Typology: Challenge-based learning experience
- ♦ ECTS Credits: 2
- **♦** Online
- ♦ Applicants: 70 from all cycles of studies
- Participants: 36 I 31 completed all assignments

AIT (4), HAMK (7), IPCA (18), IPL (2), NHL Stenden (5)

- ♦ Level: 1 SC; 28 BA and 7 MA
- ♦ 6 RUN-EU members institutions involved
- ♦ Various Backgrounds and fields of study
- **♦ 10 Nationalities**
- ♦ 10 RUN-EU Coaches engaged

FHV (1), HAMK (3), IPCA (5) and IPL (1)

♦ Business Partner: S-Group







#### **Testimony in Video (Joint Coordination)**



#### General overview:

Design Expedition was the 1st Pilot SAP organized by RUN-EU. Despite the early stage of the RUN-EU project and the tight time frame, it was considered by all directly involved an important milestone and an intensive learning experience. The enthusiastic feedback obtained from the participants confirmed the Alliance was in the right track and helped us do better next time, reinforcing the relevance of RUN-EU vision and mission associated to the SAPs.

Participants particularly recognised the following dimensions:

- Learning environment and team building;
- ♦ Emergent areas, interdisciplinarity and new skills acquisition awareness;
- ♦ Validation that the format fulfills non-traditional students' expectations and needs;
- Learning and teaching strategies, added value in cross-cultural teaching styles and discovery;
- ♦ 1st international experience, 1st online collaborative learning programme and contact with new tools;
- Peer learning within and outside the team, reinforcement of skills perceived as relevant and appreciated by the labour market.

The lessons learned and the feedback on the learning experience from participants are described in detail in **D6.1 RUN-EU SAPs Opportunities Report**, Section 5.2 and 5.3.



## 2. Circular Design with Plastics

Joint Coordination: Polytechnic of Cávado and Ave, IPCA

NHL Stenden University of Applied Sciences. NHL Stenden

Athlone Institute of Technology, AIT Limerick Institute of Technology, LIT

Date: 20 September-8 October, 2021

Objective: Circular Economy is a hot topic and a trendy term. However, what does it really imply for industry, for society, and for development? What are the existing and the emerging challenges? Circular Design with Plastics aims to present insights into these topics and examine some existing tools that can help designers, engineers, managers, and entrepreneurs. In this SAP, participants will find answers to these and other questions through online lectures, cuttingedge presentations, and multidisciplinary group work dynamics. This introductory course targets those interested in becoming familiar with Circular Design (specifically with Plastics), Circular Economy, and Circularity.

**Learning Outcomes**: at the end of this RUN-EU SAP students will be able to:

- 1. Appreciate current driving features for sustainability in a multidisciplinary and international context;
- 2. Understand the concepts of circular design, circular economy, circularity and ecodesign (among others);
- 3. Recognise the key challenges and opportunities for improving circularity in plastics, and how to quantify it;
- 4. Understand the different perspectives of ecodesign / design for X;
- 5. Understand circular supply chains and sustainable modelling.



#### **FACTS and FIGURES**

- ♦ Typology: Cutting-edge topic
- **♦ ECTS Credits: 2**
- ♦ Online and Blended (live audience room at the 4 Partner institutions
- ♦ Applicants: 41 students and staff
- Participants: 26 I 21 completed all assignments. AIT (5), HAMK (3), IPCA (6), IPL (4), LIT (3), NHL Stenden (5)
- Level: 13 BA, 6 MA, 3 PhD and 4 Staff (2 Teaching (PhD) and 2 Technical (MA))
- ♦ 6 RUN-EU members institutions involved
- Various Backgrounds, fields of study and levels of familiarity with the topic
- ♦ 11 Nationalities
- ♦ 9 RUN-EU Coaches engaged

AIT (2), IPCA (2), LIT (1) and NHL Stenden (4)





#### Teasers as part of the Comm. Strategy



**Testimony in Video (Joint Coordination)** 



#### General overview:

The overall impression expressed by the participants was very positive, namely with what concerns the learning developed, knowledge and skills transferability, teaching-learning strategies, as well as engagement. Participants emphasized the productive and dynamic spirit of the sessions, considering it encouraged teamwork, the opportunity to learn from different backgrounds and perspectives, effort management and open communication. Participants further highlighted the diversity of experts, their level of expertise, and high-quality content. Considering the enthusiasm expressed, the follow-up ideas presented and motivation to attend similar courses, it is evident the participants were actively involved and found this SAP to be a good example of accelerated learning. The development of relevant knowledge on circularity and circular design, and the possibility to experiment with both soft and hard skills were particularly acknowledged and reinforced.

Remarks about time management, workload, online learning, academic recognition and soft skills provide clues for enhancement and/or further reflection. There is a strong interest on face-to-face interaction or other strategies, in order to improve focus and attention, facilitate a sense of community and, above all, manage overlapping obligations.

The detailed feedback on the learning experience can be found in the Miro\_Group Learning Reflection (1,2) and in the Findings of the Individual Learning Reports.



## 3. Game Changing Games

Joint Coordination: Vorarlberg University of Applied Sciences, FHV

Polytechnic of Cávado and Ave, IPCA

Date: 4 October-1 November, 2021

Objective: The complexity of global challenges is constantly rising. Can we change the game with games? Taking this question as a starting point, in this short advanced programme our goal is to understand how game designers can address these complexities to incite change, fostering the sustainable co-existence of humans and the ecological systems. Creating games that motivate people to engage with these topics in a playful way could be one way of making critical issues intelligible and experienceable.

Learning Outcomes: at the end of this RUN-EU SAP participants will be able to:

- 1. Know crucial concepts and approaches of game design, theoretical approaches and indices of ecological, social and economic sustainability;
- 2. Be capable of developing and prototypically realizing a concept focusing on future challenges (e.g. climate change, social segregation, digital divide) using games as a medium or creating playful experience(s);
- 3. Work in multidisciplinary and multicultural teams;
- 4. Communicate solutions for societal real problems and challenges that demand innovation and a varied set of skills.



#### **FACTS and FIGURES**

- ♦ Typology: Cutting-edge topic
- **♦ ECTS Credits: 3**
- ♦ Blended (contact week at FHV, Austria)
- ♦ Applicants: 38 from all cycles of studies but PhD
- Participants: 29 I 25 completed all assignments FHV (5), HAMK (3), IPCA (11), IPL (1), TUS-Limerick (8) and SZE (1)
- Level: 2 SC; 24 BA and 3 MA
- 6 RUN-EU members institutions involved
- ♦ Various Backgrounds and fields of study
- **♦ 10 Nationalities**
- ♦ 12 RUN-EU Coaches engaged FHV (6) and IPCA (6)
- GameSalad Software sponsorship (free access)







#### **Testimony in Video (Joint Coordination)**



#### General overview:

The feedback from the students is very positive, having all participants succeeded in joining the contact week in Austria. Participants found the course interesting and relevant, considering it accomplished the intended goals. In general terms, they brought enthusiasm and willingness to overcome the challenges presented and would like to develop their projects further.

The experience facilitated forms of both explicit and tacit knowledge, as well as the development or consolidation of soft skills, such as problem-solving, teamwork, creativity and self-confidence. Students also relished the opportunity to meet new people and a different culture. The international collaboration in an international setting was considered extremely enriching. Career prospects and transferability opportunities were also advanced and wishes for similar learning opportunities clearly expressed.

Participants found the 1<sup>st</sup> online week too intensive, requiring a format review and some changes in the teaching strategies used to convey theoretical knowledge. Their perception to have had little time assigned to work on the prototype development must be subject to further consideration as well.

Six impact games were publicly presented in the end, including both board games and digital games, and the teaching staff was impressed with how far the students got in their development. The detailed feedback on the learning experience can be found in the **Findings of the Individual Learning Reports.** 



## 4. How to Navigate through Unfamiliar Contexts

Joint Coordination: Häme University of Applied Sciences, HAMK

Polytechnic of Leiria, IPL

NHL Stenden University of Applied Sciences. NHL Stenden

Vorarlberg University of Applied Sciences, FHV

Limerick Institute of Technology, LIT

**Date**: 5-29 October, 2021

**Objective:** The aim of the SAP is that the participants recognise the importance of future skills and set goals for developing their own future skills. To face the challenges demanded by a changing and uncertain world, we need a variety of skills to navigate through unfamiliar contexts. These kinds of skills are called generic competences or future skills. Overall, future skills are important for employability and success in the world of work and most importantly, they have the potential to enhance individual and collective wellbeing.

Learning Outcomes: at the end of this RUN-EU SAP participants will be able to:

- Familiarise themselves with various definitions of future skills;
- Utilise this information to develop proactive strategies that can be used in navigating in unfamiliar contexts;
- Think about the requirements for successful working in multidisciplinary and multicultural environments;
- Unravel one's own conceptions of learning and learning practices, and recognise learning as an important future skill;
- Recognise how future- and study skills are related to one's wellbeing and propose solutions for enhancing wellbeing;
- Evaluate the development of own future- and study skills on the basis of given feedback and self-assessment.



#### **FACTS and FIGURES**

- Typology: Future and Advanced Skills
- ♦ ECTS Credits: 3
- ♦ Blended (contact week at HAMK, Finland)
- Applicants: 46 from all cycles of studies
- ♦ Participants: 25 | 16 attended the full programme AIT (2), FHV (2), IPCA (5), LIT (2) and NHL Stenden (5)
- Level: 3 SC; 11 BA and 2 PhD
- ♦ 7 RUN-EU members institutions involved
- ♦ Various Backgrounds and fields of study
- ♦ 7 Nationalities
- ♦ 13 RUN-EU Coaches engaged

FHV (1), HAMK (6), IPL (1), LIT (2) and NHL Stenden (3)

aligned with the Run-EU Super Week





#### General overview:

The SAP focused on the importance of future skills and reflecting one's own learning in the development of such skills. The contact week in Finland was part of the RUN-EU Super Week organized by HAMK, which also incorporated the Design Factory Bootcamp and the Pedagogical Staff Development Programme, in the scope of WP3 Future and Advanced Skills Academy (FASA). The special environment created allowed a strong interaction between students and teaching and administrative staff. Several students were not able to travel due to COVID, Visa problems and organizational issues.

The students responded to the LearnWell questionnaire. This innovative quality assessment tool promotes student reflection and awareness of their own learning and enhances teachers' awareness of how students' experience the SAP. An illustration of the LearnWell results<sup>1</sup> in some of the dimensions measured can be found below:



<sup>1</sup> More information at **D3.18 FASA New Skills Programme\_Annual Relevance, Quality and Impact Report**, section 3.2.



## 5. RUN-EU Challenge SAPs

The **RUN-EU Challenge SAPs** are Challenge/Project-based learning experiences and particularly focus on the Sustainable Development Goals (SDG). They are planned for the annual RUN-EU Student Weeks and are specifically targeted at the **Local Student Advisory Boards (SABs)** members.

Four RUN-EU Challenge SAPs were offered during the 1<sup>st</sup> RUN-EU Student Week, jointly organized by the Technological University of the Shannon: Midlands Midwest (TUS), former Athlone Institute of Technology (AIT) and Limerick Institute of Technology (LIT).

The RUN-EU Challenge SAPs, worth **1 ECTS credit**, were delivered in a face-to-face mode from the **1**<sup>st</sup> **to the 5**<sup>th</sup> **of November, 2021**, in three different cities: Athlone, Limerick and Thurles. Participants were immersed in a challenge-based learning environment and worked in multicultural and interdisciplinary teams. Some preparatory work was required before arrival. All Challenges integrated invited guests, external local partners, site visits or field work.

The four RUN-EU Challenges proposed:

- 1. RUN-EU Bioplastics Challenge (held in Athlone)
- 2. RUN-EU Eco-Innovate Challenge (held in Athlone)
- 3. RUN-EU Food Challenge (held in Limerick)
- 4. **RUN-EU Sustainable Development Social Enterprise Challenge** (held in Thurles)

SAB students were able to prioritize their options, having been placed in their first two.

On the 5th of November, all students from the SABs were gathered in Limerick to have their formal SAB meeting and to participate in the RUN-EU General Assembly, where the winning pitch of each Challenge was presented to a broader audience. Session 3 - RUN-EU Challenge Programme, Winners' Pitches of the 4 RUN-EU Challenge SAPs, can be watched <a href="here">here</a> (from 2h00:00).

**Common Learning Outcomes:** At the end of the RUN-EU Challenge SAPs, students will be able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving learning challenges;
- Work in multidisciplinary, multicultural and co-creation environments;
- Communicate information, ideas, problems and solutions to both specialist and nonspecialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.



More specific information on each RUN-EU Challenge SAP is presented in the next sub-sections.

#### **General Overview:**

The feedback on the participation in this very intensive programme was very positive. Their sense of community was reinforced and felt like "something concrete" in their own words. RUN-EU was celebrated and they were very proud and happy to be part of this alliance, which represents the embodiment of intrinsic EU values: cooperation and dialogue. Surprisingly for them, there were no communication barriers. They all spoke the "same language". Same problems but joint solutions.

Participants reinforced the fundamental principle of inclusion, in general, and inclusive mobility, in particular, having highlighted the need for more funding. Because cultural exchange and multiculturalism are key motivating factors for SAP participants and essential to the development of intercultural intelligence, the students have asked for more cultural exchange opportunities. The challenges met the students' expectations, however, some areas for improvement were suggested: a more standardized approach to the challenge SAPs, teambuilding activities in the introductory part, organized tours, more logistics and less organizational complexity (due to the different sites).



### 5.1. RUN-EU Bioplastics Challenge

Joint Coordination: Technological University of the Shannon: Midlands Midwest, TUS

Polytechnic of Leiria, IPL

**Location:** Midlands Campus, Athlone

**Challenge Statement:** Bioplastics is a key driver for innovation within the plastics industry and will play a leading role going forward. In order to reach circularity and fossil- decarburization formulated in the concept, it is highly important to create a strong link between Bio-economy and circular economy. The challenge proposed is to consider bioplastics that can be used as alternatives to single-use plastic (SUPs) with particular consideration for replacing for example Personal and Protective Equipment (PPE) that has increased in usage during COVID-19 pandemic.

Bio-based plastics can make a strong contribution as they use sustainably sourced biomass as feedstock for their production. They help to diminish the dependency on fossil resources and reduce the emission of greenhouse gasses. Mechanical or chemical recycling of those bio-based plastics further adds to the reduced environmental footprint of these products. The same applies for biodegradable and compostable plastics as they increase recyclability-options by adding composting and helping to create clean organic waste streams. European Bioplastics (EUBP) also focuses on sustainable products as well as on packaging. In this regard, EUBP looks forward to closely working together with the new Commission in order to create a sound regulatory framework for the use of bio-based as well as for biodegradable and compostable plastics.

Described by the European Commission as "the greatest challenge and opportunity of our times," EUBP regards the bioplastics industry as crucial to achieving zero net greenhouse emissions. The Commission has put a special emphasis on the plastics industry and EUBP reiterates that bioplastics can be a key driver for sustainable innovation in this industry. "This roadmap marks Europe's way to becoming a resource-efficient and competitive economy with zero net greenhouse gas emissions by 2050.

To reach circularity and fossil-decarbonization formulated in the concept, it is highly important to create a strong link between Bioeconomy and circular economy.

Participants: HAMK (4), IPCA (2), IPL (4), SZE (3) and TUS (4)

Teaching Staff TUS (3) and IPL (1)

More Info: RUN-EU Bioplastics Challenge



### 5.2. RUN-EU Eco-Innovate Challenge

Joint Coordination: Technological University of the Shannon: Midlands Midwest, TUS

Polytechnic of Leiria, IPL

**Location:** Midlands Campus, Athlone

**Challenge Statement:** Ecologically sustainable, organically based, alternative solutions to peat based horticultural growth media are required to address the impacts of peat harvesting on Climate Change. Innovative use of organic waste media from food service or food manufacturing industries may provide the solution. This Challenge addresses Global Climate Change, Social Innovation and Sustainable Industry Goals.

Peat moss comes only from one source, that of peatlands, which are finite in nature and of significant importance to climate change action and carbon fixing. A change in practice needs to occur to provide a sustainable growth medium with the same characteristics going forward as peatlands are a significant carbon sink. Peat harvesting not only causes destruction to the habitat but releases significant carbon back into the atmosphere. The European Habitats Directive (92/43/EC) and the Environment Impact Assessment Directive (85/337/EEC) commits EU member states to the protection of peatland habitats and for sensitive peat extraction. This aligns with three of the UN's critical sustainable development goals (SDGs) "Responsible consumption and production"; "Climate Action" and "Life on Land". In particular SDG number 13.2 and 13.3 target a total ban on peat extraction by Producer countries within the EU and improving education and awareness on mitigation of peat harvesting impact. All EU member states must provide alternative and sustainable peat solutions by 2024.

Invited Guest – Expert Horticulturalist, and Site Visit to Lough Boora Park.

Participants: HAMK (1), IPCA (2), IPL (3), SZE (4) and TUS (4)

Teaching Staff TUS (2) and IPL (1)

More Info: RUN-EU Eco Innovate Challenge



### 5.3. RUN-EU Food Challenge

Joint Coordination: Technological University of the Shannon: Midlands Midwest, TUS

Häme University of Applied Sciences, HAMK Vorarlberg University of Applied Sciences, FHV

**Location:** Midwest Campus, Limerick

Challenge Statement: Food loss and waste represent massive systemic inefficiency and are unsustainable. Shall we do something about it?

Global stability in the 21st century is underpinned by the ability to mitigate the effects of climate change, resource scarcity and food security. A major factor in all these issues is the food waste (FW) generated from the food supply chain, which can account for up to 1.3 billion tonnes per annum, equivalent to a third of the world's total food production, estimated that one-third of all food produced globally for human consumption is lost or wasted. The current levels of food waste generation are unsustainable. The European Waste Directive commits EU member states to reduce their food waste by 25% by 2025. This aligns with one of the UN's critical sustainable development goals (SDGs) "Responsible consumption and production". SDG number 12.3 and 12.5 target transformation of "the entire food value chain from farm to fork", calling for a 50% cut in per capita global food waste at retail and consumer levels and the reduction of food losses along production and supply chains, including post-harvest losses, by 2030.

Food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the supply chain, excluding retailers, food service providers and consumers. Food waste refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers and consumers. Food loss and waste represent massive systemic inefficiency. This inefficiency contributes to many significant national and global issues such as land degradation, declining soil fertility, unsustainable water use, overfishing, food insecurity, malnutrition, inequality and GHG

emissions.

Participants: FHV (2), HAMK (5), IPCA (2), IPL (3), NHL

Stenden (5), SZE (3) and TUS (3)

**Teaching Staff** TUS (10) and HAMK (2)

More Info: RUN-EU Food Challenge







# 5.4. RUN-EU Sustainable Development – Social Enterprise Challenge

Joint Coordination: Technological University of the Shannon: Midlands Midwest, TUS

Häme University of Applied Sciences, HAMK Vorarlberg University of Applied Sciences, FHV

**Location:** Thurles Campus, Midwest

**Challenge Statement: Sustaining Rural Communities** 

Community resilience in sustaining rural communities is needed using real life solutions-based approach based on economic, social, cultural and environmental areas, anchored around the United Nations Sustainable Development Goals.

Regional policy, at the EU and member state levels, increasingly emphasizes the sustainable development of regional and territorial resilience. The current global Covid19 pandemic has brought a renewed focus on community-level resilience associated with quality of life with greater emphasis on the local community and the importance of local landscape. This challenge looks at the difficulties facing communities to be able to live and work sustainably in their rural area. These difficulties include rural depopulation; derelict or vacant housing; single person occupancy; lack of affordable housing; existing housing stock that is not energy efficient; limited infrastructure in terms of public transport links and inefficient broadband connections; limited accessibility to renewable energy opportunities; tourism/entrepreneurial initiatives not fully developed; lack of awareness of potential of community assets and opportunities for tourism/entrepreneurial potential; the need for more access, preservation and education around cultural heritage, natural and built heritage; environmental degradation; need for community based climate change adaptations and community energy opportunities; the need for the development and support of entrepreneurial spirit and finally increased awareness of social enterprise and the potential benefits of social enterprise for the community.

Participants: FHV (2), IPCA (4), IPL (4), NHL Stenden (2),

SZE (2) and TUS (9)

Teaching Staff TUS (8), HAMK (2) and FHV (1)

More Info: RUN EU Sustainable Development - Social

Enterprise Challenge

























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