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Mobilidade e Circularidade: Territórios Inteligentes e Sustentáveis

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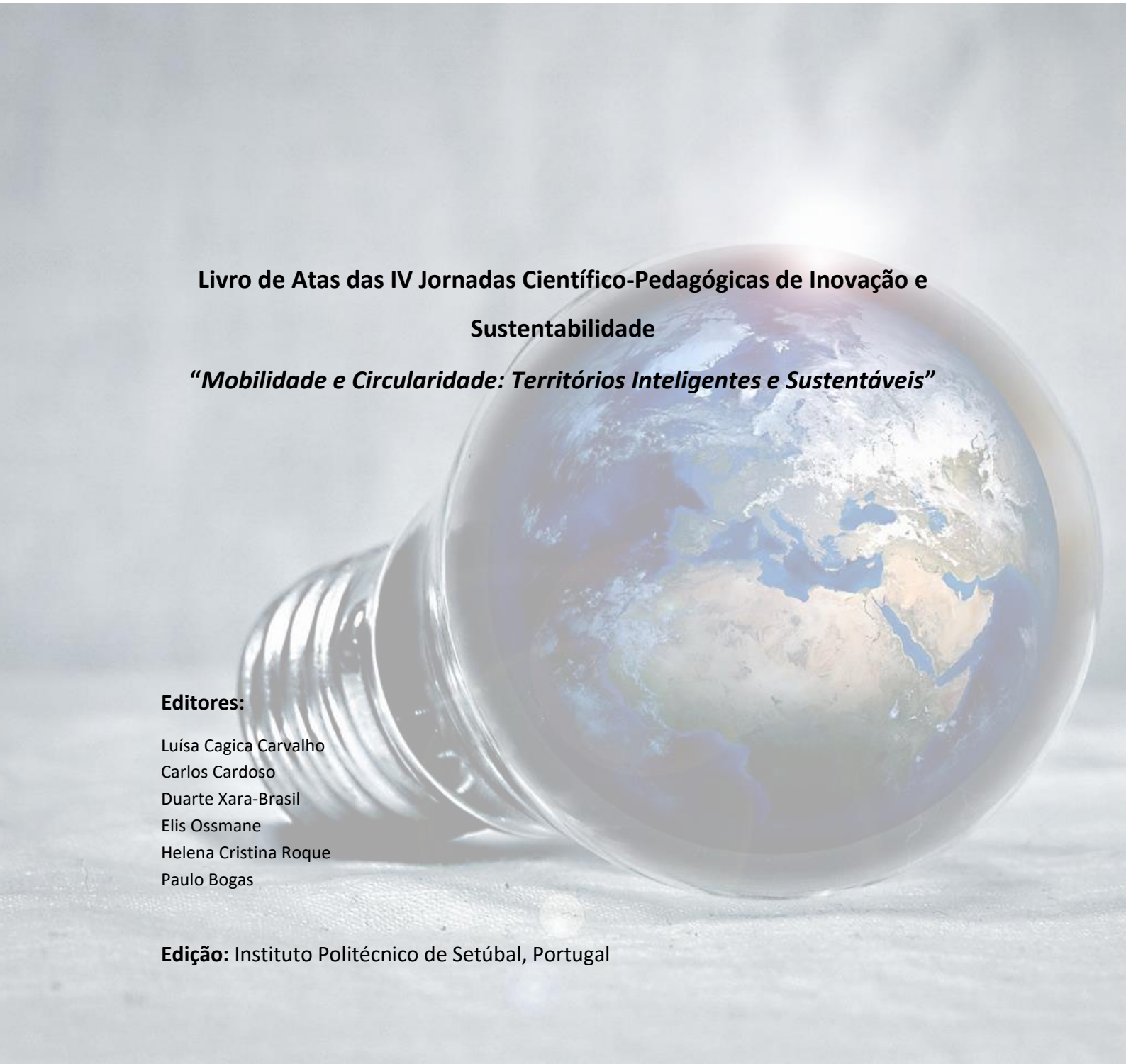

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"*Mobilidade e Circularidade: Territórios Inteligentes e Sustentáveis*"

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The Co-creation Method from a Wellbeing Experiment on Healthy Lifestyles

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Abstract

This research aims to discuss about the variety of activities that must be considered to support learners in co-creating through design thinking. In this case study the co-creation of a real problem-solving procedure was introduced to an international group of four students with interdisciplinary background in E3UDRES2 project. During a six-week period a solution was carried out by the learners for a healthy lifestyle for youngsters. The steps of co-creation were leaded by two educational entrepreneurs. As a prototype an Instagram page was planned and implemented by the learners involving an external stakeholder interested in the topic.

Keywords: co-creation, collaboration, design thinking, E³UDRES², I Living Lab

Introduction

E³UDRES² stands for Engaged and Entrepreneurial European University as Driver for European Smart and Sustainable Regions. This ongoing project adopts the innovative concept of I-Living Labs (ILL) for the development of a university of the future as well as for smart and sustainable regions. Building on the existing model of Living Labs, the foundations of an ILL are co-creation, transdisciplinary, stakeholders, learning outcomes and assessment (Blumenstein et al., 2021).

In the ILL of E³UDRES² students from international partners, working with external stakeholders, will be co-creating solutions on real life problems in one out of three domains: Human contribution to artificial intelligence; Well-being and aging; Circular economy. The educational entrepreneurs who facilitate the co-creation process use different methods throughout their ILL, depending on the specific problem in the ILL.

Goals

The ILL on Healthy Lifestyles for Youngsters (HLFY) is the wellbeing experiment at focus in this paper and was a remote ILL run throughout six teaching weeks in the first semester of 2021/2022. The main challenge is to find practical solutions to healthy lifestyles for youngsters in higher education. To reach this goal the ILL focused on innovative opportunities for students in higher education in the following wellbeing dimensions: Nutrition, Physical activities (sports), and Mental health issues.

Co-creation as a form of collaborative innovation, where ideas are shared and improved together, in this ILL, involved three types of learners (four students, two educational entrepreneurs, one external

stakeholder) from different countries (Austria, Hungary, Portugal, and Romania) and backgrounds (computing, economics, marketing, and food science (food engineering)), but a common interest on the healthy lifestyle topic. To support a user-centred co-creation process, the educational entrepreneurs of this ILL prepared a set of activities involving researching the challenge, empathizing with the end users, defining the problem, ideating as many solutions as possible, and prototyping and testing them (Westerlund, 2018). The main purpose of this research is to reflect and discuss upon these options.

Methodology

To achieve the research objective a high-level search on the design thinking methodology was first conducted in order to systematize the main issues to be addressed in the co-creation process through design thinking. Two complementary approaches were followed as a basis for the phases, step by step: the Stanford Design Thinking Model (Doorley et al, 2018) and the Six Thinking Hats, originally from De Bono (1986).

Main results and reflections

The ILL team on HLFY co-created a solution to a problem, making use of the methodology of design thinking. Known as a user-centric approach, the main currency of design thinking is empathy, defined as the ability to put ourselves in the users' shoes; to truly see the world through their eyes in a given context or situation (Huion et al, 2021; Stevens, 2021). From the first phase of design thinking, called "Empathize" up till the "Testing phase", the main purpose of the designers is to gain a deeper understanding of the needs and values of the target audience (Huion et al, 2021).

As a pre-phase, students were asked to conduct desk research on what, how, and why with the following guidelines: 1) search for information on the ILL topic from various sources (websites, books, magazines, blogs, articles, etc.); 2) divide a page into three sections and break down what they've understood as follows: What: … A healthy lifestyle for youngsters is… (concepts, dimensions, related topics,…); Why: … A healthy lifestyle for youngsters because… (facts, data, trends,…); How: … A healthy lifestyle for youngsters through… (concrete actions, good practices,…); 3) present their work briefly to the rest of the group in the next synchronous session; 4) reflect and discuss what they've learned about "the topic".

For the empathize phase of design thinking with the purpose of getting to know the user and understand their needs and motivations, students had a first empathize exercise consisting of three steps: 1) Prepare an interview participation, by choosing one of the following wellbeing dimensions: Nutrition, Physical activities (sports), Mental health issues; then thinking about the last time they had a healthy or unhealthy behaviour on the chosen wellbeing dimension; finally, describing the experience, their feelings and emotions, by answering to questions like: "How would you describe that experience?", "How did the experience make you feel?"; 2) Conduct a brief interview, by pairing up with his/her reflection partner in a breakout room and proceeding as follows: Person A interviews Person B and then switch roles; 3) Create an empathy map, by filling it on its four quadrants (says, thinks, does, and feels), based on the interview

they have conducted, presenting it briefly to the rest of the group, and reflecting and discussing what they've learned about "the user".

The additional empathize exercise involved an external stakeholder, Hungary's biggest plant in egg processing. Students were asked to collect their questions to the external stakeholder related to the three major topics in healthy lifestyle (healthy nutrition, sports and exercise (physical activity), mental health). They then conducted the interview with Capriovus Ltd. and finally collected their interview notes on the Mural board, a virtual whiteboard app where their interview questions were.

Taking both empathize exercises, students proceeded to the define phase in order to unpack the empathy findings into needs and insights, and scope a meaningful challenge, with the final aim of narrowing down the broader design challenge to something more specific (Huion et al, 2021; Stevens, 2021). In that phase, students had a two-step define exercise. The first one called "Good point of view" (POV) consisted of: 1) going back to the unpack activity and formulate a POV by combining the following three elements: User - defines the type of specific user whom they are writing their POV about; Need - identifies the users' essential needs/goals; Insight - synthesizes the gathered information into a key takeaway and this statement can be used to design a solution; 2) inserting their information about the end user, the needs and their insights, by filling the sentence: "the user (describe vividly) needs… because of… (compelling insight)". The second step of the define exercise called "How might we?" (HMW), consisted of: 1) reframing the POV statement as a "how might we" question; 2) presenting both the POV and the HMW that they have defined; 3) reflecting and discussing on the POV/HMW to proceed in the next design thinking stage.

In the next stage, ideate, in order to come up with ideas and solutions to solve the user's problem, students had a three-step ideate exercise: 1) take their POV statement / HMW question and collect as many solutions as possible; 2) present their solutions; reflect and discuss to come up with new/improved solutions; 3) reflect and discuss on the solution to proceed in the next design thinking stage.

Prototyping i.e., the design and development of solution(s) proceeded also as a co-creation process, followed by a testing phase in order to gather feedback, refine solutions, and continue to learn about the potential end users. To that end students were first asked to test with youngsters in higher education (the end users of this ILL) and then test with the external stakeholder. In both cases students let the user/stakeholder experience the prototype, have them talk through their experience, actively observed the user/stakeholder, and followed up with questions (Doorley et al, 2018).

Finally, students reflected and discussed what they've learned with both testing exercises and, by making use of the design thinking process as an iterative, non-linear process, they subsequently refined their POV statement / HMW question and improved their prototype.

Conclusion

Both educational entrepreneurs learned the way of design thinking and were able to lead the group in its step by step. Moreover, every student was involved in every single activity from the very beginning. The small group size helped to find common interests and engage the students. They were especially engaged

in creating and designing the final product, an Instagram page called egg.tually (Gealapu et al., 2022), in which they were continuously uploading their new ideas and improving the whole profile during testing phase. Finally, Capriovus Ltd aims the development of new, innovative food products, to which the students were able to identify and to involve the company's interest in their work during defining, prototyping, and testing periods. The involvement of the stakeholder gave the impression to the students that they are working on a real useful solution during the ILL. At the end, all learners developed specific competences by working collaboratively on solving societal challenges.

References

Blumenstein K., Tanzer C., Kókai Z., Kovács Z., Costa A., Ramos A., Neven J., Huion P., Cerulus S., Kucina I., & Leščevica M. (2021). E³UDRES² Learners & Educators. Final Report.

De Bono, E. (1986). Six Thinking Hats. New York: Little, Brown.

Doorley S., Holcomb S., Klebahn P., Segovia K., & Jeremy Utley (2018). Bootleg d. school at Stanford University.

Gealapu A., Fernández P., Zimmermann P., Baleti A., Moreira S., & Tóth A. (2022). Egg.tually – A Healthy Lifestyle Guide for Youngsters. Forthcoming.

Huion, P. (ed.), Sayer H., Aycicek H., Malai L., Ronco M., Pinto-Bello Gomez R., Cijs E. (2021). Methodological Guide. The Community Project. Diepenbeek: UCLL.

Stevens, E. (2021). How To Run an Awesome Design Thinking Workshop. UX Design. https://careerfoundry.com/en/blog/ux-design/design-thinking-workshop/ [Accessed 21 December 2021].

Westerlund M., Leminen S., & Habib C. (2018). Key Constructs and a Definition of Living Labs as Innovation Platforms. Technology Innovation Management Review, 8(12): 51-62.