

INTEGRATING SUSTAINABLE APPROACHES IN DISTANCE LEARNING UNIVERSITIES: THE EXPERIENCE OF UNIVERSIDADE ABERTA

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Abstract

One of the key components in practicing sustainability and developing a sustainable Higher Education Institution (HEI) is the role played by the institution community including students and its staff, both administrative and academics according to a whole-campus approach. However, there is still a lack of how to integrate sustainability-related approaches into the HEIs, by involving the whole community of the HEI, in particular in distance-learning institutions.

Recognizing this lack, Universidade Aberta (UAb), the Portuguese Distance Learning University, has recently integrated sustainability approaches into the University actions by establishing the “UAb Sustainable Campus Group” in 2021. In line with Agenda 2030, the Group promotes the sustainability approaches at UAb in 5 core elements of sustainability actions at HEIs: i) planning and administration, ii) operation and innovation, iii) academia and research, iv) assessment and reporting, and v) involvement with the community. This paper aims to reveal the recent sustainability initiatives (2021-2023) carried out by the Group and enlighten how a distance-learning University's actions, programs, and approaches have been integrated into the core elements of sustainability actions at HEIs.

Several steps were implemented to address sustainability initiatives at UAb based on the

proposed framework, considering: 1) “planning and administration”, by the formal commitment to sustainability that arose in the UAb Strategic Plan (2019-2023) to enforce sustainability initiatives centered on people and social commitment; 2) “operation”, by UAb contribution to the resource efficiency programs; 3) “academia and research”, by designing a micro-credential module entitled “Sustainable Development Goals (SDGs)”, that were piloted in the academic year 2022-2023 and were evaluated the students’ knowledge improvement on SDGs and sustainability and their perceptions on the effectiveness of the training through pre- and post-questionnaires; 4) “assessment and reporting”, through self-assessment and reporting tools, among them, Time Higher Education Impact Ranking, which ranked the UAb sustainability initiatives towards SDGs 4, 5, 6, 8, 10, and 17. Also, with the collaboration of the administrative staff, the UAb Ecological Footprint (EF) was self-assessed through the University Ecological Footprint Calculator, which allows HEIs to calculate their consumption of natural resources and ecosystem services within the direct and indirect responsibilities of the administration, by bearing in mind the specific feature of distance learning.

The results for “planning and administration” showed the UAb commitment to sustainable campus by the signatory of several associations, e.g., RCS-Portugal, AASHE - Association for the Advancement of Sustainability in Higher Education, and Lisbon Green Commitment to implement a set of measures to reduce the environmental impacts by 2030. In the “operation” element, the results revealed the UAb contribution to the Resource Efficiency Program in Public Administration - ECO.AP 2030 to reduce the consumption of resources and respective Greenhouse Gas emissions facilities, as well as the Energy Saving Plan (2022-2023). The results of the “academia and research” element based on the SDGs course showed the students’ knowledge improvement of both Sustainability and SDGs and a high level of satisfaction with the training, mainly appreciating the “diversified learning resources”. The results of the “assessment and reporting” based on THE displayed the UAb improvement on SDGs 4 and 5. The results of the EF calculator disclosed that “staff labour” was the main driver of the UAb Footprint in direct responsibility, whereas “energy consumption at home” was the main indirect contributor to the UAb Footprint, which showed the effect of distance learning on the results.

Future work of the Group includes offering the SDGs micro-credential, targeting also public and private organizations, and later as a formal curricular unit in various degrees, thus enhancing the “involving the community” element. Also, based on the results of the assessment tools, the major drivers of unsustainability at UAb will be identified to assist the necessary improvement to reduce the environmental impact of UAb, thus reinforcing its commitment to building a more sustainable community. The framework for the implementation of sustainability in UAb can be adapted and tested in other HEI to produce robust knowledge and action in this context.

References

- AASHE. (2019). STARS Technical Manual Version 2.2. 1–322. Available at: <https://stars.aashe.org/wp-content/uploads/2019/07/STARS-2.2-Technical-Manual.pdf>.
- Lozano, R., Ceulemans, K. and Scarff, C. (2015). Teaching organisational change management for sustainability: designing and delivering a course at the University of Leeds to better prepare future sustainability change agents. *Journal of Cleaner Production*, 106, 205–215. doi: 10.1016/j.jclepro.2014.03.031.
- Time Higher Education Impact Ranking. (2023). Impact Rankings Methodology 2023. Available at: <https://www.timeshighereducation.com/world-university-rankings/impact-rankings-2023-methodology>.