

## **An evaluation of the “Red Andalucía Ecocampus University of Malaga” environmental education program.**

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### **Abstract**

Training university students so that they become professionals who will promote an improvement in the relationship between socio-economic activity and the environment is one of the main challenges in higher education. Thus, it is important to evaluate the Environmental Education Programs offered by public institutions to the university community. The objective of this research is to assess the impact of the “Red Andalucía Ecocampus University of Malaga” Program in relation to the involvement of the university community in the environmental sustainability of its setting. A mixed methods design was used. Research participants included teachers, students, and administrative and service staff at different research and training centers of the University of Malaga (n = 387). The results in this research work reveal that this Program has an effective methodological design when it comes to acquiring concepts and strengthening environmental values in the university community.

**Keywords:** Environmental education; program evaluation; sustainability; higher education

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### **1. Introduction**

The present study is based on a theoretical frame of reference related to the values and attitudes provided by Environmental Education in the university environment and its contribution to the conservation of the natural environment. Training and qualifying managers, planners and decision-makers so that they orient their values and behaviour towards a harmonious relationship with nature is a crucial challenge in Education (Novo, 2009).

According to Lara (1990), in any Environmental Education activity, the best way for participants to understand environmental problems is to approach them directly through a local situation, and its conclusions and analysis should connect with global perspectives, bearing in mind that there are multiple interactions in all environmental issues. According to Gonzalo, Sobrino, Marín, Benítez & Coronado

(2017, p. 85), “the differentiating factor of sustainability competencies is the inclusion of action for transformation in order to achieve change in education for sustainable development”.

Environmental Education is education for action. It can be carried out through volunteer activities related to solving problems that occur on our planet. According to Rivarosa & Perales (2006), the design of a program of activities as a learning sequence to promote skills and attitudes around a specific environmental problem facilitates the analysis of different approaches, and even the development of a possible solution to the conflict presented with a certain level effectiveness and durability.

Andalusia is a region of Spain home to a great diversity of landscapes and an extraordinary fauna and flora biodiversity. A significant part of its territory is included in a network of protected natural spaces in Europe, “Red Natura 2000”. In view of this, it is important to properly value Andalusia's natural heritage to promote the social, economic and cultural benefits of habitat conservation and improve public knowledge and appreciation through awareness-raising and volunteer actions that contribute to solving environmental problems.

UNESCO, the lead agency for the United Nations Decade of Education for Sustainable Development (DESD, 2005-2014), promotes the creation of educational resources to improve our relationship with the natural environment. The involvement of the university community in the promotion of environmental sustainability (social, environmental and economic) is fundamental as it is a key sector of society with great potential to have an impact on the improvement of our human relationship with the natural environment based on the professional responsibilities of its members (Gutiérrez, Benayas & Calvo, 2006). More and more universities are incorporating environmental sustainability in their management. However, its inclusion in the university syllabus and in the different lines of research it carries out continues to be a challenge in the context of effectively involving universities in the achievement of the Sustainable Development Goals (SDG) defined by the United Nations and which include the 2030 agenda (United Nations, 2015).

In November 2016, the European Commission set out its strategic approach for the implementation of Agenda 2030, including the Sustainable Development Goals (United Nations, 2015). In line with this commitment, the Sustainable Development Goals are included in each of the European Commission's ten priorities. The University is a key agent of society transformation, one of its main functions being to shape new attitudes and behaviours compatible with the conservation of the natural heritage. Within the scope of their corporate social responsibility, universities must commit themselves to achieving

these Objectives for Sustainable Development, prioritizing the establishment of strategies that connect the university community with environmental problems (Escolano, 2006; Losada, 2018).

According to Leal Filho (2009) and Rieckmann (2017), education for environmental sustainability is a process of continuous training aiming at promoting an informed and involved society that develops creative skills for solving environmental problems. The European Higher Education Area is increasingly involved in the growing environmental problems in its territories through the development of initiatives such as the establishment of different university networks to promote sustainable development in higher education. An example of this is the Network for the Training of Environmental Education Professionals (CAPEA, Spanish acronym), which aims to link Ibero-American and Spanish university centres to deal with regional and local problems related to climate change, pollution and the responsible use of water within the main areas of influence of the participating universities (Martín & Tójar, 2013).