

CONSIDERATIONS ON IMPLEMENTING THE CONCEPT OF SUSTAINABILITY IN HIGHER EDUCATION IN ROMANIA

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Abstract: *This paper reviews definitions and frameworks for sustainability in higher education by examining a few national and international institutional policies related to sustainability higher education. The paper highlights a fundamental research that consists of analysis, processing and assimilation of bases knowledge found in international used. This paper presents various aspects of implementation of sustainability in higher education in Romania and the international level. Following the theoretical and practical research, we found some suggestions and recommendations that should be implemented in Romanian universities for a sustainable development of higher education.*

Key words: *sustainability, education, universities, implementing, development*

1. INTRODUCTION

Contemporary society considers sustainable development to be the best way to address the complex and interrelated issues of society and environment for the sake of current and future generations and for the integrity of the planet. Globally, progress towards sustainable development is deemed highly imperative.

While all actors of society must contribute in the transition towards a sustainable world, universities are seen as a major catalyst to work towards this goal. In the past, universities have played a historic role in transforming societies and in serving the greater public good.

Romanian education is in a continuous process of changing and modernization, and for this reason, we need to find and implement solutions for sustainable development of the educational system in Romania. In this sense, the paper will present results of theoretical researches on sustainable development of university education in other countries, which are applicable in Romania.

In the first part of paper is presented the research methodology, and in the second part are emphasized the research results.

2. RESEARCH METHODOLOGY

Research methodology for developing the study is based on observation (as research method) and is shown in Figure 1.

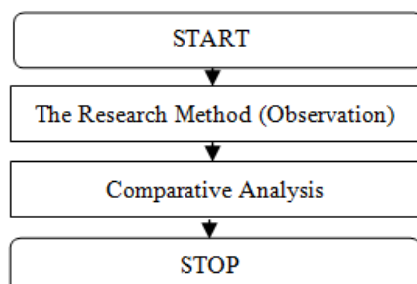


Fig. 1. Research methodology

Research methodology used in this paper, is based on fundamental research that is analyzing and assimilating existing realities at the national and international level in education field. In this paper we made a comparative analysis between what sustainable development means in Romanian universities and abroad.

The problem of sustainable development of higher education in Romania should be analyzed in terms of the two approaches:

- higher education in Romania will become sustainable when they will develop a strong link between universities and the business environment
- students will be prepared in conjunction with labor market demands and company need.

For students to meet labor market demands, must acquire practical skills that can only gain during internships. They should have a longer duration and be conducted in the company with strict rules established between the university and company. It is necessary to achieve some national studies among students and entrepreneurs to develop skills and competencies of graduates of higher education in line with environmental requirements of affairs.

For higher education in Romania to be sustainable, the courses script need to be updated regularly, and sometimes radically change, correlated with technical, technological, scientific or otherwise arising from national and international level.

3. RESEARCH RESULTS

After theoretical and practical research, we identified several suggestions and recommendations which should be implemented at the level of higher education institutions in Romania:

- Create research centers in higher education for sustainable development in Romania after the two models (3.1);
- Suggestions and recommendations (3.2).

3.1 Research center for sustainable development in higher education, in Europe

The European universities have established research centers for sustainable development of the educational system as the two listed below:

Italian Centre for Research and Environmental Education of the University of Parma (C.I.R.E.A.)

C.I.R.E.A. is a research and services Centre, whose main objectives are to promote interdisciplinary research, to develop and realize interdisciplinary educational activities and to collect and preserve documentary and bibliographic material related to Environmental Education.

All activities developed by C.I.R.E.A. are addressed to the promotion of sustainability in its multidimensional vision.

From a methodological point of view, C.I.R.E.A. acknowledges the importance of an action research approach and supports initiatives that:

- “involve knowledge, values, behaviour, experiences, to promote respect and interactions among all life forms in the environment;
- have the opportunity to build and spread a modern culture that is “capable of future”, that is able to go beyond a “throw away” mentality and to base its actions on a “sense of limit”;
- promote opportunities and contexts to foster the development of dynamic qualities, to build the capacity to make decisions in the face of uncertainty, to increase the awareness that the capacity to predict can not be separated from the willingness to face the unpredictable, to educate for dialogue and conflict management among different points of view;
- strengthen coherence between action and knowledge, between statement and behavior” (Charter of Fiuggi, 1997).
Even if the experience of C.I.R.E.A. could be “unique” and stimulating in the Italian scenario of higher education system for sustainability, several aspects need to be remembered (Bachiorri & Puglisi, 2007).

Center for Cooperation in Sustainable Development and Environmental Management between the Saint-Petersburg State University and Beahrs Environmental Leadership Program, University of California, Berkeley

The Saint-Petersburg State University undertakes a wide range of activities on Education for Sustainable Development, in particular:

- “develops educational courses dedicated to various aspects of sustainable development (at many faculties);
- opens new specialties to be incorporated into master, in particular, international programs;
- establishes public associations of students and lecturers;
- prepares and implements additional professional training programs;
- undertakes projects on educational, scientific, and practical aspects of sustainable development;
- builds intersectoral partnership, networking.” (Chernikova & Voropaeva, 2007)

This is paralleled by the integration of innovative methods and approaches, essential for developing a new culture of educational process, with:

- changing the contents of educational programs;
- integrating new organizational institutes;
- modifying the functions and roles of the main actors of the educational process;
- integrating new training methods.

3.2 Sugestions and recomandation for sustainable development in Romanian universities

In devising its education programs and curricula the University relied on the following principles and approaches:

- interdisciplinary approach and interrelation of disciplines in education programs, enlarged the humanitarian component of curricula;
- interdepartmental and interfaculty integration in curriculum design and implementation;
- problem-oriented education;
- integration of University and Research Centre; permeation of environmental safety and Sustainable Development principles through virtually all the specialty courses in the curricula;
- incorporation into curricula of new special courses, Sustainable Development and Environmental Policy and Politics, Agenda-21 (is a programme run by the United Nations related to sustainable. It is a comprehensive blueprint of action to be taken globally, nationally and locally by organizations of the United Nations, governments, and major groups in every area in which humans directly affect the environment).

Adjusted to professional orientation, the qualification requirements for University graduates in ecology imply being aware of:

- environmental safety and sustainable development basics;
- ways and methods to formulate sustainable development policy and strategy, as well as Local Agenda-21;
- basic methodology of decision-making and implementing decisions on environmental safety and sustainable development;
- ways and methods to create adequate information systems to support the decision-making;

The transition to sustainable development requires ecologization of all activities and implementation of sustainable development principles in all key sectors of society. Universities are engaged in training specialists of different profiles for these sectors, which make reasonable incorporation of sustainable development and environmental safety course(s) in all faculties.

4. CONCLUSION

From the research conducted, we propose the creation and development of research centers in addition to universities in Romania, similar with the models described above.

Three important aspects of Education for Sustainable Development for Universities should be considered:

- Creating and teaching the new philosophy of development, based on the concept of sustainable development, which we consider essential for all university students. Such courses would promote the new consciousness and world view for future specialists and citizens of the XXI century;
- Integrating sustainable development principles into training of specialists in various fields for relevant sectors of society (e.g., sustainable mobility, energy, spatial planning, etc.);
- Devising special interdisciplinary (interfaculty) educational programs for the training of specialists in sustainable development. A new type of specialists able of holistic, strategic thinking and taking systems inter sectorial decisions is needed for development and implementation of long-term action plans on and management of transition to sustainable development.

In the future, we plan that the research on sustainable development of higher education to be based on finding answers to these questions:

- How should Sustainable Development competences be taught/learned at technological universities?
- Which curriculum structure is more suitable to facilitate the acquisition of Sustainable Development competences?

5. REFERENCES

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