

Education in Sustainability – A Case of Business Administration

Abstract: This paper presents an overview of concepts and learning perspectives that characterize the proposal of the undergraduate program in sustainability management at School of Management of Federal University of Parana (Curitiba, Brazil).

Keywords: Sustainability, Business Administration, Design Thinking, Experiential Learning, Social Constructivism

Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defined that sustainability is grounded in three core pillars which involve environmental, social and economic issues. Thus, the United Nations (UN) stated that education is the primary agent of transformation of a society which is currently characterized by egocentrism, individualism and a high degree of consumerism; whereas our cultural alienation and dependence of the intensive materialism has been driven and empowered by an economic model of maximizing production and consumption which, in turn, has leading to the minimization of the environmental resources and a deterioration in values and social conditions of mankind. In such a context, education stands out as the primary process and agent of transformation which should provide changes in human and social behavior in order to develop a sustainable future in terms of environmental, social and economic integrity. Motivated to contribute and to provide an education that prioritizes sustainability, the School of Management (DAGA) of the Federal University of Parana (UFPR) has appointed a group of professors and students to develop the project of a new undergraduate course in sustainable business administration (or sustainability management) which includes the participation of professors from Case Western Reserve University and executives of the Federation of Industries of Parana State (FIEPR) along with other seven universities located in Curitiba, Brazil. Therefore, this paper aims to present an overview of the conceptual and pedagogical perspectives that characterize the proposal of the undergraduate program in sustainability management of School of Management (DAGA) of the Federal University of Parana (UFPR).

The Learning Process

Despite the emergence of an increasing number of worldwide academic and business projects on sustainability, this work has its focus and its foundation on UN resolutions involving the integration of principles, values and practices toward an education that should

contribute to environmental, social and economic sustainability. On the basis of UN resolutions on sustainable education and concepts of the constructivist theory of Jean Piaget (1896-1980) and others, the research team of DAGA / UFPR has identified the following constructs to characterize a transversal process of teaching the new full time bachelor program in sustainability management:

i) Awareness: is the process of sensation which stimulates the student's cognition, sensitiveness, interest and consciousness with respect to its local and global environment, allowing him the identification of major and minor problems. In this phase, students are made aware of their degree of anomie or ignorance on issues of sustainability, leading them to reflect and to prepare for the construction of new structures of knowledge. The awareness is built up through case studies in the classroom, laboratory and field work, along with ethnography research.

ii) Knowledge: is the process of constructing knowledge from the trial and experience, where the students get to know an object through its use and modification, including how the object is processed. In this phase, knowledge is constructed through the cognitive processes of assimilation, accommodation, and equilibrium (or adaptation), providing insights and understanding to the person and to the group; whereas understanding is to discover, or reconstruct by rediscovery, and these conditions must be observed and treated at the present if we want to reach in the near future a society who aims to educate people endowed with creativity and knowledge production, and not just repetition. Here, students develop their heteronomy with respect to sustainability, whereas they are, in some degree, subjected to the concepts of sustainability in order to assimilate new behavior and attitudes.

iii) Attitude: is the process that defines the behavior of the student or group of students with respect to the ecological, social and economic environment; being endowed with responsibilities along with ethical and moral values for sustainability. At this stage, students develop sustainable attitudes through awareness, knowledge creation and assimilation of values, whereas their discoveries pass through the experimentation.

iv) Ability: is the process of identifying and developing capabilities for the students. These capabilities provide the students with the skills and knowledge to make decisions and to solve systemic problems. This step includes disciplines or courses that they can develop skills and competencies in making decisions and solving complex problems, through which, they should find sustainable solutions.

v) Participation: is the process of involvement and commitment of students with regard to sustainability. In this phase, the students develop their autonomy to live in the sustainability. The development of skills and competencies for innovation and learning (or meta-learning) by the student are also characteristic of this stage which is a means and not an end, since this five-phase process (from i to v) is cyclical, continuous and transversal.

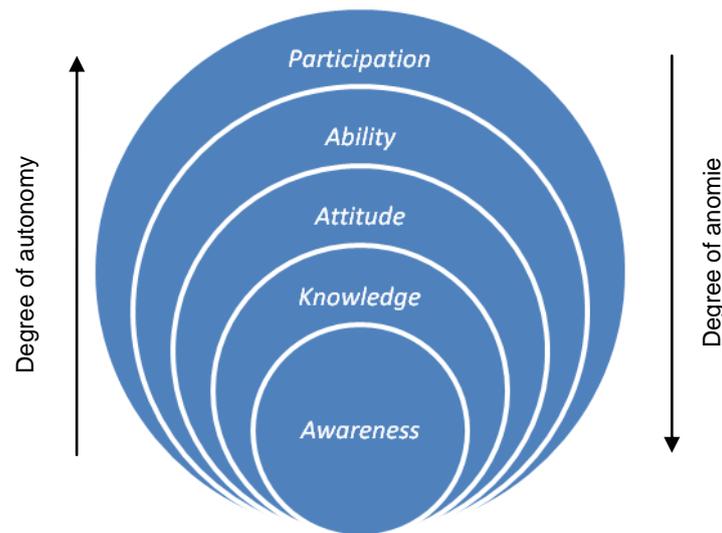


Figure 1. The Social Constructionist Process for Experimental Learning

Conclusions

Education for a sustainable society should be centered in the students and in the development of their autonomy, along with in the production of knowledge and cultural environments for collective creativity. It should not be taught only through words, but mainly from observation, analysis and supervision (by teachers) of the processes of awareness, knowledge, attitude, ability, and participation (of the students). The five constructs of the learning process presented in this work not only contribute to theory building, but most important they provide the students with the social environment for development of sustainable ethical values and experimental learning.

References

- Cória-Sabini, M.A. (2008) *Psicologia do Desenvolvimento*. Editora Atica: Brasil. (in Portuguese).
- Goulart, I.B. (2009) *Psicologia da Educação: Fundamentos Teóricos / Aplicações à Prática Pedagógica*. Editora Vozes: Brasil. (in Portuguese).