World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:9, No:09, 2015

Eco-Literacy and Pedagogical Praxis in the Multidisciplinary University Greenhouse toward the Food Security Strengthening

Authors: Citlali Aguilera Lira, David Lynch Steinicke, Andrea León García

Abstract: One of the challenges that higher education faces is to find how to approach the sustainability in an inclusive way to the student within all the different academic areas, how to move the sustainable development from the abstract field to the operational field. This research comes from the ecoliteracy and the pedagogical praxis as tools for rebuilding the teaching processes inside of universities. The purpose is to determine and describe which are the factors involved in the process of learning particularly in the Greenhouse-School Siembra UV. In the Greenhouse-School Siembra UV, of the University of Veracruz, are cultivated vegetables, medicinal plants and small cornfields under the usage of eco-technologies such as hydroponics, Wickingbed and Hugelkultur, which main purpose is the saving of space, labor and natural resources, as well as function as agricultural production alternatives in the urban and periurban zones. The sample was formed with students from different academic areas and who are actively involved in the greenhouse, as well as institutes from the University of Veracruz and governmental and non-governmental departments. This project comes from a pedagogic praxis approach, from filling the needs that the different professional profiles of the university students have. All this with the purpose of generate a pragmatic dialogue with the sustainability. It also comes from the necessity to understand the factors that intervene in the students' praxis. In this manner is how the students are the fundamental unit in the sphere of sustainability. As a result, it is observed that those University of Veracruz students who are involved in the Greenhouse-school, Siembra UV, have enriched in different levels the sense of urban and periurban agriculture because of the diverse academic approaches they have and the interaction between them. It is concluded that the eco-technologies act as fundamental tools for ecoliteracy in society, where it is strengthen the nutritional and food security from a sustainable development approach.

Keywords: farming eco-technologies, food security, multidisciplinary, pedagogical praxis

Conference Title: ICAHS 2015: International Conference on Agricultural and Horticultural Sciences

Conference Location : Istanbul, Türkiye **Conference Dates :** September 28-29, 2015