

**ISEKI-Food - Integrating Safety and Environmental Knowledge Into Food Studies towards
European Sustainable Development – a Socrates TN**

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Abstract

The main objectives of the ISEKI-Food project (104934-CP-1-2002-1-PT-ERASMUS-TN) are to contribute for the harmonisation of the studies in Food Science and Engineering in Europe, and to develop and adapt curricula to include safety and environmental topics. The main activities underway and conclusions will be presented and can be obtained at the web site <http://www.esb.ucp.pt/iseki/>.

Key words: Food Studies, Environment and Safety topics, curricula, teaching methods and materials, general public.

Introduction

The curricula in Food Science and Engineering (taking into account the following degrees, Bachelor, Higher Diploma, Master, PhD, post-graduations and Continuing Education) in Europe are very diverse. There are for example backgrounds with a stronger component in Science, others in Engineering, and a 3 year BSc duration followed by 2 years of Master or Higher diploma courses, etc. Although this diversity has a positive value, in terms of the variety of the backgrounds and type of teaching materials available, it causes also a problem in terms of the recognition of the degrees, that it is not the same in all the countries.

The analysis of the curricula in Europe was studied by the Socrates Thematic Network – FOODNET – Food Studies in Europe (Project nº. 55792-CP-3-00-FR-ERASMUS-ETN), in which it was prepared a database, available in the web site: www2.esb.ucp.pt/foodnet/. Although the diversity of backgrounds offered, there is a big lack in terms of the knowledge of security, and in particular in the consumer public health and environment; backgrounds on renewal resources are almost unavailable in the majority of the institutions offering diplomas in Food Science and Engineering.

The main objectives of this Socrates Thematic Network (104934-CP-1-2002-1-PT-ERASMUS-TN), coordinated by Escola Superior de Biotecnologia, Universidade Católica Portuguesa, are to improve the harmonisation of the studies in Food Science and Engineering in Europe and to develop and adapt

the curricula with the objective of including safety and environmental topics. As more specific objectives, these are: 1. Increase the interchange between partners (Universities, Industry and Students) in a teaching point of view: topics studied, materials and methods (including ICT and ODL); 2. Contribute to a higher knowledge of the transformation processes for the food products; 3. Develop new and improved teaching methods, with the main purpose of developing the personal skills of the students; 4. Contribute for the continuing education, by carrying out workshops and ODL courses; 5. Contribute for higher information of the public in general (particularly students in preparatory and secondary levels) about topics of food science and engineering, and more specifically about safety topics (on the public health point of view), environmental impact and protection.

This Network includes 56 teaching institutions that offer degrees in Food and Environmental Science and Engineering, Microbiology and Biotechnology, and 16 industrial and research partners. The project does not include 3 of the countries under the Socrates Programme. These are Luxemburg, Lichtenstein and Cyprus.

This thematic network is actively working to achieve the goals of the 9 action lines established in the Bologna Declaration of June 1999 and Prague meeting in May 2001: *“Establishment by 2010 of a coherent, compatible and competitive European Higher Education Area, attractive for European students and for students and scholars from other continents”*.

Management Structure

Five working groups have been formed to achieve the above-mentioned objectives. The activities are divided as follows: 1) Harmonisation of the studies in Food Science and Engineering, with emphasis on safety and environmental topics, 2) Collection and development of teaching materials and methods, 3) Dissemination of Food Science and Engineering topics to the general public, with special attention to safety and environmental topics, 4) Relationship between University and Enterprises, with particular relevance to mobility and industrial placement of students and 5) Practical and Laboratory teaching at pilot plant scale. Each working group is leaded and co-ordinated by one of the partners of the network, in collaboration with a second one.

The project has a Steering Committee that will assess and supervise all the activities. This Committee is constituted by the coordinator (partner 1), coordinators of the working groups and 5 Non-University partners, experts on Safety topics, Environmental topics and Food Science and Engineering.

In every year of the project two meetings are organized with all partners. Another meeting of the steering committee can take place in between the two overall meetings.

Results and Discussion

A critical analysis on food science and engineering curricula, with emphasis on environmental and safety topics, and a collection of materials and syllabus of environmental and safety disciplines were the main outputs of the first year of the project.

The results of the 5 groups during the first year are: 1) Implementation of a curricula database, 2) Preparation of a web catalogue of materials and teaching methods, 3) Preparation of a web page with FAQ on Food Science and Engineering, 4) Preparation of a report concerning the Relationship University/Enterprise, 5) Preparation of a web catalogue about Practical / Laboratory teaching at Pilot Plant scale.

During the first year a Webpage of the ISEKI- Food TN project was created. Leaflets and a poster were published, and two newsletters were prepared and put in the webpage. The main activities underway and conclusions are presented and can be obtained at the web site <http://www.esb.ucp.pt/iseki/>.

In the second year, a proposal on harmonised curricula with minimum requirements will be prepared, having the contribution of Tuning Counsellors. Furthermore, a wide range of dissemination materials will start to be ready, such as catalogues, publication on webpage, critical analysis documents, ODL courses on safety and environmental topics and workshops.

Further work

The quality of the project will be evaluated in terms of the quality of the materials prepared, number of people requesting permission to access the partners zone of the ISEKI web page: www.esb.ucp.pt/iseki, number and curricula of people attending workshops and following the ODL courses, degree of implementation of suggestions and recommendations of the network on curricula, syllabus and teaching methods and others. Furthermore, for the workshops and ODL courses, its quality will be also evaluated by the participants and by using appropriated questionnaires.

The project will be also evaluated by checking if the planned activities and corresponding outputs and deadlines are achieved.

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