CHALLENGES AND OPPORTUNITIES TO INNOVATE EDUCATION AND TRAINING IN FOOD SCIENCE AND TECHNOLOGY

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Education has a main role in fostering innovation and in promoting economic development in all manufacturing sectors. This concept is also well described in the "*Knowledge Triangle*" model that highlights the importance of an interplaying link of education with research and innovation. Within this framework, academia plays a key role by educating graduates that during their professional career will become active players as professional, practitioners, employees and entrepreneurs in various roles in the food sector and by the development research and transfer of the new knowledge to the main stakeholders of the food value chain.

The food system is, however, challenged by ever-growing societal needs due to significant changes occurring at several levels (economy, society, technology, environment) that require increasing investments in R&D along with proper actions able to promote innovation and to develop a sustainable and "knowledge-based" society by including a modern education system to comply with the knowledge transfer and skills needed for the current and future workforce.

While educational and training approaches and methodologies for the 2.0 young generation need to be updated and upgraded a ssuccessful modernization of the HE food studies and enabling sustainable societal and economic growth require the implementation of adequate academia-research-job market interactions and their improvement in a wider societal framework also with the involvement of policymakers and other stakeholders to promote flow of knowledge and innovation.

The development of a constructive academia-industry interaction cannot be limited on a knowledge transfer focused on cooperation of research outcomes as well as on students start-ups. Innovative type of collaboration need to be implemented that provide increasingly-recognised value for stakeholders through more formalised student and staff mobility, curriculum development and delivery, governance and lifelong learning cooperation and indirectly through 'spill-over effects.

Enhancement of the educational approaches with an international, intercultural, intergenerational and interdisciplinary perspective should be also taken into account.

In the Food Science and Technology/Engineering sector, the ISEKI_Food network has promoted since 1998 continuous and diligent projects (e.g. FP7 Track_Fast, Erasmus TN ISEKI_Food) aimed on enhancing HE. These efforts involved a large number of representatives of main food supply chain stakeholders representing countries from all over the world. The just-ended project (ISEKI_Food 4, <u>www.iseki-food4.eu</u>), focused on modernization and upgrading food studies programmes, promoting employability and entrepreneurship of the graduated FS&T, and expanding lecturing qualifications of university teaching staff.