The impact of practical training and professional development for students in enhancing European competences in Food Science and Technology.

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Abstract. Including students in special practice curriculums, such as the one initiated by University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, they become more aware of the entire process in the food industry, from the acquisition, reception, management of primary and auxiliary materials, to the importance of hygiene, protective equipment, the temperature and operating mode and the sales of the final products. The aim of the study is to evaluate the impact of practical training and its role in transforming students in future engineers better prepared for the labor market.

Keywords: practical training; engineers; food industry; competences

Introduction. While the university remains a cultural institution, creating value, not for a moment forget that the purpose for which it receives funding or that students pay taxes is not to form people of culture, but to provide specialists in certain economic and social fields (Mihailescu, 2007).

The aim of the study is to evaluate the impact of practical training for Food Science and Technology students in terms of overall impact on competences in the European food industry to produce safe, high quality and varied foods that meet the needs of consumers.

Materials and Methods. For the study we have analyzed and evaluated the students during their practice programs. We had short discussions with them individually about their likes and dislikes related to the individual programs.

Students of the Faculty of Agriculture from UASMV Cluj-Napoca are performing practice programs during the 2nd and 3rd year of bachelor program, through fully equipped Pilot plants such as Milk dairy products, Meat and meat products, Brewery Plant and Bread & bakery belonging to the Food Engineering Department. In these pilot plants the students are trained by technicians and academic staff to participate in food technology production. This is important because the young students learn about all the processes, becoming responsible in turn with: evaluate the raw materials inputs, purchasing, receiving and controlling the production in authorized laboratory, HACCP monitoring, labeling, delivery, sale.

All these play an important role in supporting the knowledge accumulated in courses and laboratories and providing an overview on production and its problems, on responsibilities that they might have as Engineers / Food control specialist. They improve their competences learning these things by own, including methods to correct problems or manufacturing defects that can occur.

This is important because in the current economy we should check students especially at the output, not just at the input, how they are prepared for the labor market. The practical training is intended to improve the old way of teaching. Each teacher is normally concerned only with his discipline. Teachers do not gather together to tell the student "Look in your job, you do this and that. For this, take what you learned from the field X and combine what you learned in the field Y and find a solution. Our education is focused towards
memorising, not on the application. Correlated, these elements make the newly emerged student unable to integrate in activities immediately (Pânzaru, Ion).

**Results and Discussion.** Analyzing the students opinions in these practice programs it was observed that they came with great pleasure to work, for 6-8 hours per day and work effectively. This time they settle their knowledge, they become aware of their assimilated knowledge/gaps and realize various production processes fully. Although even they don’t not like sanitation days, they realized it with pleasure as they learn its importance and its unwanted effects. Students have requested increased hours of practice and diversification of production.

Also as we saw in the exhibition: “New products in Food Engineering - IPA 2012”, to students was gradually transferred knowledge, resulting in the end of the license / dissertation innovational results that could be exploited in the form of products and services, as can be seen in these examples: yogurt with added meat (steak outlaw), whole meal bread with functional ingredients, smoked fish salami with soy protein, modern packaging systems for beer - Bag in Box, distilled drinks from wine aged by modern methods, cream butter with palm oil, bran crackers with rosemary and many more.

**Conclusion.** The practice curriculum initiated by UASVM has a role in transforming students in future engineers better prepared for the labor market. Also correlated with entrepreneurship courses and business management, we could instill to students with bolder and more flair entrepreneurial spirit, that is a necessity in the current economic period.

REFERENCES