

On an Example of the University – Enterprise Cooperation

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Abstract: *The paper shares one example of University – Enterprise cooperation based on BSU, consulting company and Water Utility. Specific faculty students were selected and sent to the utility/consulting company for an internship. The content of their internship, daily routine, the designed project are described. The identified problems are analyzed. Recommendations are developed. The ways of further cooperation are discussed.*

Key words: *cooperation, enterprise, BSU, water utility, curricula.*

The contemporary fast changing world and the continues strive of the universe for the internalization has been touching every aspect of the mankind life for the last decades, resulting in the giant leap towards new, unacknowledged yet in the comprehensive and holistic manner, way of life where constant development in the economy of the county, increasing interest in innovations and the series of attempts to closely follow the fundamental standards that condition the sustainable economy are reckoned to be the key characteristics of countries worldwide. Globalization and internationalization are the engines keeping the countries in constant drive in terms of trying to respond to the current demands on the regional level and taking the leading part in innovations considered to be the core activities in ensuring the sustainability in economy and high quality of performance playing the vital roles in building up the competitive environment.

In order not to fail in the competition it is essential to ensure deep understanding of the needs as well as the ways of effective realization of them. Therefore, it is obvious that the competition could be won only by those that will manage to meet the global standards and create prospective strategies allowing them to apply to the fast moving world and all newly developed trends. Only intense observation of the developments and knowledge of every single change in the market trends could give the opportunity to business sector to monitor the evolution and make relevant steps in the production and service provision in compliance with high quality standards. Detailed knowledge and thorough analysis of the market enables business sector to assess the current status of the market properly based on what the new and effective road to further development could be made.

In the regard of the above mentioned the interaction with the universities plays a huge role since highly skillful academic staff can contribute to the effective investigation of the market to the large extent since the scientific researches in various fields serve as the basis for identification of the current status of the market, the potential available on the regional or country level as far as the future development concerns. The sound knowledge, professionalism, and skillful staff- these are the key words that are closely associated with the prosperity of the economy of the country.

All these skills that appear to be the prerequisite for being able to cope with the facing challenges in the modern society are provided by the higher educational institutions responsible for bringing up the experts with the qualities that should meet the market requirements. In this context In order to achieve high performance by the university it is necessary to have an uninterrupted flow of information from the later to the business sector and vice versa. In other words these two units must keep a constant dialogue they benefit both from through what the gaps existing in the higher educational institution or the enterprise could be effectively filled via transferring the relevant sources from the other side of this dialogue.

Modern societies, particularly ones of the developed countries are increasingly exercising the above mentioned university-business sector cooperation approach since they value

how dynamically these relations can contribute to their success. Closer the enterprise representatives follow the education process better the performance of the university is. More and more universities try to get the enterprise representatives involved in their educational processes through different ways depending on the potential of the region and the possibilities and profile of the university.

The presented article aims at demonstrating one of the above mentioned cases of the university-business cooperation on the example of the achievements so far of Batumi Shota Rustaveli State University in the regard of the cooperation with several leading enterprises in the region. The article gives the complete and detailed picture of the experience of Batumi Shota Rustaveli state University starting from very first steps made by the university including the current status of the cooperation model.

Considering above stated needs Batumi Shota Rustaveli State University initiated cooperation with water and wastewater utility "Batumis Tskali" ltd in 2011. The accreditation standards stipulated by the law binds the universities and its each academic team to adjust the learning outcomes and competences to the requirements of the employers and other interested parties. All accredited universities have passed first stage that generally seems to be rather formal and remains only on the level of proper documentation filing. Thus, the first interest of the university to seek for and establish stable cooperation with enterprises was mainly stipulated by the above stated fact in order to meet the accreditation standards. Moreover, the Batumi State University as a partner of several EU educational projects, particularly the Tempus Cap4com projects [1]., shared the experience of the leading EU countries on University-enterprise cooperation. At the later stage, BSU undertook responsibility to form CPE that should become the center of the employer-graduate network to support employment process of its graduates. All the activities related to improvement of the University – Enterprise cooperation is well-reflected in the London communique that states: "Our aim is to ensure that the higher educational institutions will permanently have the resources that are necessary to achieve their goals. These aims are: to prepare students for active citizenship in democratic society for future carrier and personal development; to provide wide, modern education to students and support research and innovation" [2]. The Bonn Declaration on university-enterprise cooperation in the context of lifelong learning highlights: "A converging HE sector is better placed to address the needs of the European labor market. The Bologna Process therefore sets a high priority on employability and self-employability. To this end it seeks to achieve a major cultural shift: from a traditional teacher-based model to one focused on student-centered learning and on competence-building" [3]. Therefore, Therefore, it turns out that in order to have close cooperation with enterprise is principally necessary not only to meet the accreditation standards, but also to modernize curricula considering needs and necessities of enterprise that would ensures adequate employment opportunities for the university graduates.

Meanwhile, in 2005, municipality of Batumi commenced huge municipal infrastructure rehabilitation project with support of German development Bank (kfw) together with "Batumis Tskali" ltd as a successor and future operator of the rehabilitated assets. Necessities were identified during the implementation of Municipal infrastructure rehabilitation project started in 2006 – ongoing financed by KfW under the German-Georgian financial cooperation. Since 2007 several modern facilities of water and wastewater systems have been constructed. Despite structural reorganization of the Utility and more than a few training sessions conducted for the utility staff, it was obvious that the current staff was not able to cope with the advanced technology introduced. Moreover, because of improper operation, several electrical equipment was out of order and damaged. The search for the staff with the relevant qualification was barely fruitful as it was hard to find any qualified person with engineering education at the local labor market. That could be explained by the fact the engineering faculty was not prestigious for the last 15 years that created generation gap in the profession.

Therefore, the utility decided to address the university to identify best students to make them interested to have an internship at “Batumis Tskali” ltd. On January 23, 2013 first meeting was held at the university with the representatives of University management, “Batumis Tskali” management and two infrastructure rehabilitation project consulting companies MACS and EGIS where MoU was signed and first activities initiated. The requirements for application to the internship were following: III and IV year students of engineering faculty, good academic records, readiness to learning, imitativeness, flexibility, team worker, creativeness and knowledge of Georgian, English and Russian languages; Initially 38 students applied but only 6 of them were selected. After the first stage, these six students were tested and interviewed. Finally, within the frame of processing stage of Batumi Rehabilitation Project - Phase III (which was implementing by the consortium: Egis, Lamayer, Municipal Project and Geohydroservice), there were involved the students from Engineering faculty of BSU: Giorgi Tsinaridze and Petros Sanamian. After the involving into the designing process, apart from the exact instructions, the students had the trainings to learn the specialty thoroughly. It should be noted that the students knew the AutoCad Program well that made easier to have relations and working process with them. According to Egis management, the students were expressing curiosity towards the specialty, attentively listened to the chief engineers and tried to perform carefully all the assigned instructions as well. The scope of work was: sewerage manholes inspection, working on the base maps, defining the big consumers, defining the street names and ID-s, site visit on the land for Chakvi reservoirs, putting on the drawing all the data about constructing and perspective facilities and checking them on place and etc. Considering the reputation earned the internship that was initially planned only for three months, eventually it lasted for 6 months. Apart from the recommendation letters from the Consortium for the future employer, Consortium offered working contract to the interns as to very perspective, reasonable and responsible young specialists. In parallel, other 4 students directed to the utility were divided into water and wastewater groups. There were introduced to “Batumis Tskali” ltd work routine, new facilities. The students were asked to carry the trainee’s dairy to reflect accurately their work task. The team of interns was given an independent project to develop “design water supply system for Chaisubani settlement – 19 households in Phagava street that would be implemented in reality. The students work included design of the pipeline, cost estimation, material selection and construction supervision. Internship lasted for three months.

“Implementing double-win strategy to strengthen the cooperation of university and enterprise can not only meet the needs of the development of enterprises, but also enhance the higher education personnel training advantages, realize the sharing of resources and promote the complementary advantages between institutions and enterprises and its intensive development. [4]. The expectation of the project team was to have round table meeting of the university and utility representatives. The meeting should have discoursed the problems arose and identified the necessities of the enterprise to reflect them in the curricula. The meeting is still pending. The question arises who should be more interested in this feedback meeting – the university or enterprise. Considering the abundance of the labor market of Georgia with HE diploma holders, it seems easier for enterprise to take up a graduate to train him to fit the job description. Therefore, we believe that university should promote meeting with enterprise. Based on the problems and challenges the university will be able to augment HE staff necessities, to modernize curricula to meet the enterprise needs that would facilitate for the university graduates to follow up their carrier.

There are several other issues like how to motivate enterprises to cooperate closely with universities (In some countries like Italy regional government applies financial tax exemptions of the SME in case they cooperate with the universities), development of thesis on job site and ensuring thesis supervisor form the enterprise should become the topics of the next articles.

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