CONTEMPORARY UNIVERSITY: FROM THEORY TO KNOWLEDGE FACTORY

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Abstract
Elevation of technological innovations, achievements generating permanent development, globalization and universal connection had determined other types of level and knowledge criteria for current and especially future workers. Number of university educated workers is expected to be rapidly raised up on behalf of the high school educated workers. As last third level of education, the university education profiles the future workforce. Correspondingly, the character meaning yet more insists on knowledge that apart from theoretical values will also have practical – being enforceable. According to Peter Senge, the new knowledge expensive seeds do not always fall on rich ground. The university institutions yet more oriented from clearly theoretical-narrative and transfer knowledge poured off to creative-pragmatic. The direction of transmitted examination is yet more imperative. The university institutions manifest their function in different ways with same focus, but different results.

Keywords: University education, University management, theory knowledge in practice

Introduction
Nowadays the knowledge gains more and more applicative dimension rather than simply theoretical. Simply stated, the functionality of the theoretical knowledge is reflected into its percentage of realization. The management of knowledge as a discipline of the new century is an academic approach, but it is still minor in its process aspects. However, this does not rehabilitate the organizations of the higher education from the responsibility to implement the management of knowledge, first of all in their own surroundings, and then, based on their experience, into the everyday work and practice. The base of the general rise of the success in the integrated university is the management of the human resources. There are several situations which generate and develop this management of the human resources. Unfortunately, this rarely happens. Six key aspects of the integrated university can be defined: training sector, career development based on capabilities, change management, inititativity, leadership and management of suppliers and consumers.

If the business is considered to be a mirror of the universities, it is clear that universities have significant role. The universities, with the strength of the mind and the

initial dimension of the knowledge which is transferred on his participants (whether directly or indirectly), creates the social ambient. So, the knowledge is the resource which has a direct impact on the society, and the university is the main place for transfer and implementation of the knowledge. Furthermore, it is essential that the knowledge is also checked, not only transferred. In this case, the verification of the knowledge must be made in real circumstances, through practice.

With the introduction of the private higher education in Republic of Macedonia in the sphere of the academic capitalism was caused demystification of the educational processes. Correspondently, in the sphere of the academic managerism the accent was put on the information technologies, as well as on their expansion and usage in the global society of the knowledge. The wish for an active integration of the students caused increase of the awareness and orientation towards the business elitism. A balance between the knowledge of the students and the needs of the business world was achieved. However, all this is not enough if the transferred knowledge is not implemented into practice.

**Factory of knowledge: From project to a program**

Having in mind the above mentioned, FON University in Skopje, The Republic of Macedonia, in 2010 has initiated a project named as Factory of Knowledge, whose main purpose was a promotion of increased practical implementation of the theoretical knowledge and a popularization of a more efficient way of gaining knowledge, as well as a verification of the theoretical knowledge. In the years 2012/2013 this project became a program whose main function was to initiate and increase the awareness and courage among students and in meantime, to be in a position of a mediator between the students and the needs of the business world.

The idea of transformation of this project into a program was to:

- Estimate the value of the theoretical knowledge into practice
- To estimate its degree of utility
- To be an indicator for a future correction
- Correspondence of the theory and the practice
- To estimate the expectations of the business world from the students
- Promotion of the success of the businesses
- To estimate the degree of readiness of the students for their infiltration in the business world
- To be a tool for self-criticism
- Gaining new knowledge and skills

The beginning of the project Factory of knowledge in FON University in 2012 was incorporated in the program Career (PC), which main purpose is to take care for a real and competent improvement of the students. The Program Career comes from the awareness for the general conditions of the university knowledge which transfers in 3 sectors – academic capitalism, academic managerism and business elitism. Therefore, the initial idea for the project Factory of Knowledge 2012, as a part of Program Career is forming of a modern educational partnership between higher education institutions and developed economic-legal entities in the country.

Taking into account the fact that the major intention was to realize a program with real valuables and realistic results, the activities form this project were mainly taken and realized from the students. The role of the educators and teachers was forming teams, introduction to the activities, giving instructions, mentorship and guidance in the independent work of the students. Meanwhile, for the first time Factory of Knowledge was formed with an intention for an international cooperation into the Euro-Atlantic integrations. The international cooperation was constructed as a collaboration between the municipalities.
Podgradec in Republic of Albania and FON University, as a part of the project for improved treatment of the Ohrid Lake.

The project Factory of Knowledge created an ambient of a specific academic-business forum through the collaboration and communication between the students included in the project and the representatives of the business elite. This project improves the skills and the level of expertise of the students. Additionally, a significant improvement in the field of academic writing is achieved.

**Project goals**

The main purpose of this project was to present the real situation in the Macedonian business world and to identify its needs. This related to our university and this project specifically means that we try to produce workers who will satisfy employee’s needs and preferences. This comes from the fact that in the Republic of Macedonia, before the creation of this project, there was almost no collaboration between the higher education institutions and the business world. For this reason, their expectations and needs are different – the supply on the work force market satisfies the demand in a small percentage and vice versa. This project helped us to see the actual needs on the work force market and the business world in general, which had an impact on the curricula and the educational process in the University.

The major goal of FON University was to create, through this project and kind of cooperation, an academic-business forum which through practical work on real projects will define and determine the differences between the needs of the market and the skills of the future work force. The project Factory of Knowledge is considered to be an indicator for a potential correction to overpass the differences in the expectations of the employers as well as the students. In the last few years, there is a certain trend of creating a highly educate nation, but this has a counter effect – this just increases the differences between the businessmen and the educated students who are the future workforce. FON University has realized the need of additional practical work and implementation of the students in real projects on the one side, and on the other side this caused huge interest among the businessmen. The main reason for this instant understanding between the students and the business world comes from the fact that they both have realized that once it is known what the business world needs, it is easier to be achieved.

Furthermore, the project Factory of Knowledge had a self-critical character if we take into account the fact that in this case was also examined the level of expertise of the teachers as well as the knowledge of the students. Through the work on these projects the abilities of the students as well as of the teachers were under inspection – the professors were giving students instructions and constant guidance and monitoring. What is really important in this project is that students gain new skills and new knowledge and find more effective and more efficient ways to use the theory into practice.

All this, of course, required additional efforts, energy and ability to confront with the challenges as well as understanding of the future results. During the realization and at the end, at the presentation of the results the credibility and the capacity of the potentials of the University were noticeable. The confirmation of the achieved results and solutions of the real problems from the business world came from the businessmen themselves.

**Experiences gained**

The realization of this project was related with a couple of factors. First, it was necessary to realize an activity which is compatible with the role of the University in general, with a special accent on its position, intention and responsibilities in the actual moment. From the very beginning, a dose of awareness for the capacity to start something new and
unrealized was needed. Also, without knowledge, it was impossible to structure and guide more than 200 students (from second to fifth year) who were organized in teams who were working for 7 prestigious Macedonian companies. The base of the knowledge from the professors and collaborators was transferred to the students who were stimulated to find the solution of the problem by their own.

The project Factory of Knowledge was realized through activities of the students, the professors and the collaborators from 8 faculties at FON University. The total work engagement took 7 months in two semesters or around 7 830 working hours, from which 5 300 hours work of the students and 2 520 hours work of the professors. The work engagement of the students from different faculties is as follows: Faculty of Economics – 3 505 hours, Faculty of Law – 1 145, Faculty of Informatics – 650, Faculty of design – 1 130, Faculty of Applied Foreign Languages – 774, Faculty of Political Science – 361, Faculty of Sport and Sport management – 70, and Faculty of Security and detectives – 185 hours.

In this project were included a big number of students, as well as a big number of professors, whose task was to guide the students, to monitor them, to coordinate, to control and to give them certain directions. Around 45% of the students came from the Faculty of Economics, first of all because of the task they were given from the companies-collaborators. However, students from different profiles were included in each team, and special projects were created for certain profiles of students. The fact that every group was an integrated team in which everyone tried to give their own best solution for the problem has to be taken into account. Of course, the students had the support of their professors – mentors, who were managing the projects.

The experience for FON University from the project Factory of Knowledge is huge because, first of all, this project created an opportunity for definition of the eventual problems in the curricula and the educational program. Factory of Knowledge clearly reflects the real situation and the needs of the Macedonian business world, precisely shows the real situation and emphasizes the need for change into the educational system in order to make the students ready for infiltrating at the market of the work force right after graduation.

**Conclusion**

With the realization of the project Factory of Knowledge, FON University gained acknowledgement that the education offered is on a higher level than the usual transfer of knowledge. The tasks given to the students have actually shown how well the theory can be utilized in practice. The students, trying to express their competences, have come with final solutions and concrete products/services\(^{433}\) which had a theoretical background. With this project, the higher education is situated and a bridge for cooperation between the business world and the students is created.

What is very important is the direct connection with the companies who took part of the project Factory of Knowledge. The companies who were part of this project had their own representatives, who held meetings with the students from the different teams on a regular basis. At these meetings, additional directions and corrective activities were given, giving the students freedom to choose their own way of solving the problem. All of the solutions presented in front of the companies were successful. Furthermore, interesting ideas that need to be improved and elaborated deeper were given. Significant part of the solutions given from the students, are nowadays implemented in the companies.

\(^{433}\) In the project Factory of Knowledge 2012, the companies who took part were: Komercijalna bank, TAV Airports, Renova, Grozd, Tikvesh
The project Factory of Knowledge was realized every year, but 2011/2012 can be pointed out as the most successful because of the achieved success and the international dimension.

First of all, one of the most important results was the satisfaction of the companies from the solutions presented, the constant work of the students as well as their mentors.

Another important result is that, apart from the relation between theory and practice, the students gained new knowledge and new competences which improved their qualifications. This allows them to get involved with the society and the environment more active as academic citizens.

A new development phase emerged for the students and for the higher education institution, for bigger and more successful development, which is just an initiative for bigger successes and positive results in future. This is a phase that requires constant improvement, development and expansion.

Most probably one of the major results is the creation of a new awareness, new dilemma and challenges not just for the students, but as well as for their professors – mentors and the companies which were directly included into the whole process of work. New dilemmas and new challenges, which is very important for this dynamic and changeable world in which we encounter new dilemmas and challenges on a daily basis, and for which we try to find the best solutions and decisions.

Recomendation

The base of the constant improvement and success of the integrated university is in the relation towards the human resources. There are similar conditions that generate and develop this relationship. Unfortunately, this rarely happens. Six clue concepts can be defined for the integrated university: sector for training, career development based on abilities, change management, initiative, leadership and management of suppliers and consumers. Probably, the primary task of the University in the actual moment is to provide an opportunity for the right people at the right time with use of the educational technology and the new knowledge. The purpose to provide real relationship between the quality academic resources, practice and the educational technology probably is a good approach. The level of the future continuous improvement and development depends a lot on the successfulness of the integration of these elements.

The educational institutions really need advanced systems based on knowledge, and in the meantime there are working practices that can seriously harm the transfer of knowledge. The strategies and the practices for management of the knowledge must start with an integration of the separate systems and re-building of the opportunities which are offered by the strategies and the practices of management of knowledge, and this most certainly is the hardest challenge for the educational institutions. Higher education institutions can start and with an identification of groups of people who already have synergic work relations and sharing in one organization. This can help for establishing the base of one strong culture of research and reflectiveness and thus creating mechanisms for sustainable, long term organized learning. Of course, the most important in this approach is that the student most probably will have benefit from these practices for knowledge management.

In the process of continuous development and improvement of the higher education institutions there are mainly 3 directions: implemented strategies, management of knowledge and applicability of the same into practice. In this process the most important role of the university in the efforts to be more successful is creating a culture and cult towards the

learning. The process of lifelong learning first of all should be implemented on itself, and then as a model to be used from the others. Understanding its role, the university will realize that it is one of the most important players in the creation of the business, as well as the society. Must be considered that the changes first must take place into the high education institutions, and then with rise of their own capacity, to have an impact on the society. The management of knowledge is a task which higher education institutions must define on the postulates of the entrepreneurial society: initiative, creativity, invention, competence and of course competition. Based on the grounds on these general and universal valubles the university can make a huge improvement in comparison with the current position.

As a general message from the whole project, we can say that this project woke up the awareness for the new time, time of change, dilemmas and challenges. Among the students who took part in this project there was a positive feeling of satisfaction. The satisfaction of the work is really an important element for a successful and positive income. This project strengthened the academic spirit of our university in our country, as well as on international level.

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