

Suncica Oberman Peterka, PhD

Review of doctoral dissertation:

"Entrepreneurial Universities in Function of Efficient Dissemination of University's Intellectual Property"

Research question *What kind of university we need today in order to best answer the needs of turbulent environment we live in* is the basis of dissertation *"Entrepreneurial Universities in Function of Efficient Dissemination of University's Intellectual Property"* by Sunčica Oberman Peterka, MSc. This question has enabled the candidate, through researching an institution (university) to arrive at the question on responsibility for change, but also to potential answers, whose implication is in the sphere of further research, policy recommendations and practical demonstration of possible changes on the studied case, i.e. J.J. Strossmayer University of Osijek.

This doctoral dissertation is based on the thesis that university must become entrepreneurial, not only because of social responsibility towards the development of society, but also responsibility towards its tradition and role thus far in development of society. In today's society, processes of globalization and subsidiarity are intersecting, involvement and the right to equal chances are complemented with strong leadership for leading positive change, development is followed by development imbalances within countries and regions of the world. Managing these processes, which are creating a unity in their contrariety, is imposing new approaches, like the Triple Helix model of economic development in which efficient interaction between academic, business and government sector is achieved. The Triple Helix model of economic development strengthens the capacity of innovative and entrepreneurial acting of all the participants, and thus also of the university, where *entrepreneurial* denotes a responsible university, which actively cooperates with its environment, takes care of environment's needs, and employability of its students, capacitating them for lifelong learning, which ensures sustainable competence of recognizing changes as opportunities and not as danger, and change management.

While maintaining scientific independence, university must be capacitated for an active contribution in creation of Triple Helix relationship with the business sector and the government (from local to international level). Only in conditions of trust among three key

participants of the Triple Helix it is possible to sustainably develop a society that is based on the culture of proactivity, innovativeness and readiness to assume risk, that is, the entrepreneurial culture. However, universities are not protected from inertia, and there are many examples of slowness in innovating content and processes through which intellectual property is transferred to the community. Problem of institutional inertia is especially emphasized if case is of knowledge that is being developed on the margins of established disciplines.

The essence of candidate's scientific contribution is in an excellently executed historical analysis of the university through which she found an abundance of information, which prove that university always had to be responsible, not only autonomous (research university, university responsible for implementation of its intellectual property). And whenever university was in a crisis, it would return from autonomy to responsibility towards its environment, thus ensuring its survival. Building upon this knowledge with an analysis of discussions about entrepreneurial university, candidate has successfully created a model of entrepreneurial university and ascertained its diagnostic capacity by evaluating the level of enterprise of the J. J. Strossmayer University of Osijek.

The most important scientific contribution of this dissertation is in creation of the model of entrepreneurial university and its testing on a concrete case. Using numerous discussions (Clark, 1998, 2001, 2004; Gibb, 2002, 2005; Etzkowitz, Leysdorf, 2000; Gibbons, 1998, 2004) and connecting them with the Porter's model of competitive advantages, candidate has created a model of entrepreneurial university that enables universities to estimate their potential for efficient involvement in the Triple Helix concept of responsibility for economic development. By checking the model on the concrete example of the Josip Juraj Strossmayer University of Osijek, candidate has confirmed the logic of the model, and has also established incompleteness or non-existence of components of entrepreneurial university in this concrete case. In that regard, model also has a diagnostic dimension, which is important for defining strategies and policies needed for building of an entrepreneurial university.

The model consist of four basic elements, two value components and a system of connections between basic elements and value components. Basic model components are entrepreneurial university core, developed university periphery, strong (collegial) leadership, and diversified financing. Value components of the model are: responsibility and autonomy of university, as

two inseparable characteristics of entrepreneurial university (through responsible behaviour towards environment university obtains the right to autonomy in performing of its activity) and integrated entrepreneurial culture, which presumes high integration of all university elements around the value dimensions of entrepreneurship (proactivity, innovativeness, readiness to assume risk), and high decentralization of university on the principle of subsidiarity in reacting to changes in the environment. Model is based on a systematic approach, which presumes connection of all parts of a system - in the model of entrepreneurial university this means mutual connection of each component and value determinant, and openness towards the environment. Coherence of internal connection, which is the essence of Porter's model of competitive advantages (Porter's diamond), is the fundamental characteristic of this model also, and university's capacity to recognize opportunities in the environment and turn them into its undertakings depends on it.

Based on research conducted in doctoral dissertation candidate has opened a new (or old) research question: What should be done in order for university to become a successful learning organization? Why university, which pretends to create knowledge and transfer it to others doesn't take a closer look at itself and explain why it is so slow in reacting to changes in the environment? Is it only because of shortage of money, or does organizational culture based on myths (autonomy), and even taboos play a role? Does the manner of advancement of lecturers' careers ("publish or perish"), and governors (deans, rector, from a closed circle within the university) also play a role? Candidate correctly concludes that search for the answer to that question must be based on interdisciplinary research utilizing knowledge from field of systematic, organizational, biological, social, psychological sciences.

It is especially important to point out that the candidate does limit herself just to the research level but, consistent with the message on which she insists in the dissertation, which is university's responsibility for solving problems in its environment, opens the important question of the policy aspect of relationship between the society and the tertiary sector of education industry. Why did, in spite of individual efforts, Triple Helix concept remain insufficiently used in designing policy measures towards the tertiary sector? If the lack of trust between three important segments (business sector, academic sector, government) is one of the reasons, further question why is that so arises.

Also, consistent with her standpoint on seeking for solutions of identified problems, based on diagnosing the level of entrepreneurial capacity of the J.J. Strossmayer University of Osijek, candidate gives a range of recommendations, implementation of which would be a valuable applicative contribution to institutional profiling of Osijek University as the leader in development of entrepreneurship as scientific and teaching discipline in Croatia, but which is capable to apply the same on its own transformation from traditional to entrepreneurial university. Candidate has explained the reasons behind every recommendation well, and argued them with "good practices" that exist in the world, and it would be good if these recommendations would not remain just a part of creation of this doctoral dissertation. The most important recommendation is establishment of a department for entrepreneurship, as it has been done at some world universities (In United Kingdom: Cambridge University has a Center for Entrepreneurial Learning and Cambridge Enterprise, or Hunter Centre for Entrepreneurial Studies at Strathclyde University; in USA: Academy for Entrepreneurial Leadership at University of Illinois at Urbana-Champaign). Candidate proposes this department could have the role of a referral center for all Croatian universities for development of teaching methods that contribute to development of entrepreneurial capacity of the individual. Creation of a **positive and entrepreneurial organizational culture** of the J. J. Strossmayer University of Osijek, where each individual feels attachment and the need to contribute to university's progress, is deemed the key recommendation by the candidate, which must be built consistently over a long-term.

By implementing these recommendations, J.J. Strossmayer University of Osijek has the opportunity to make a step forward towards a modern, entrepreneurial university, which anticipates changes in its environment and actively contributes to its development. Thus it would ensure long-term competitive advantage and recognisability at the international scene.

With research conducted in the dissertation Sunčica Oberman Peterka, MSc has shown that she has an excellent command of systematic approach as scientific methodology for researching problems, that she sees the whole picture, that she recognizes the complexity of connections of various influence factors in defining entrepreneurship, but doesn't get lost in details when searching for the solution. Besides, candidate is very good at using qualitative research methods, such as *grounded theory*, *oral history* and *case method*, with which she

enriched the information basis based on which she evaluated the level of university's entrepreneurial capacity.

With this doctoral dissertation, candidate has continued to build her research habitus based on openness towards interdisciplinarity, searching for research subjects in immediate environment and the courage for proposing solutions and their verification in practice.

We propose to the candidate to expose the model of entrepreneurial university developed in her doctoral dissertation to public expert discussion, and to make the recommendations for Osijek University available to university's management.