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Title of the paper : Articulation of the activities of the "third mission" universidad-region: between the spontaneous generation of knowledge and the reality of regional development.

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ABSTRACT

The search for compelling answers to the complex problems and new political, economic, social and even environmental challenges which are facing different regions in the world, has generated in the last decade a look towards the recognition and appraisal of the science, technology and innovation as the key for the construction and increase of capabilities of countries and regions. This dynamic is not presented as a transversal model that must be carried to all countries with the same magnitude, unlike is prompting the design of more flexible policies that allow adaptation in different contexts (Altemburg, 2008).

In this new scenario, Governments have positioned the universities as key players in the generation, development and application of knowledge. As a result of this phenomenon, the universities have needed, not only to reconfigure their strategies to meet its mission objectives, but also to create new forms of interaction with Government, industry and civil society. This University role and their contribution to society is part of what some authors call the "third mission". For the case of Latin America countries this vocation to the immediate environment of universities is known as University Extension, gestating its origins from the so-called Cordoba's reform in 1918 (Arocena and Sutz, 2005).

Although Colombia stands out as one of the countries with a steady socio-economic development compared with the countries of Latin America, it still presents many typical problems of the region, especially on issues related to the development and economic competitiveness, as well as deep social inequality and growing increase in poverty and among other features. In this context, the country has been redesigned public policies that enable a better interaction between the science and the economics of knowledge (OECD, 1996), emulating the practices implemented by developed countries or organizations that brings together them.

This study explores the cooperation and integration forms of higher education institutions in Colombia, taking as reference point the National University of Colombia, from the practice of its University Extension presenting an approach especially in activities which aims the development of urban and rural areas. The results expect to show the ways how University integrates, participates and adapts itself to the contexts and needs of each geographical scenario; as well as to contribute to the debate about the magnitude, orientation and role of University in the articulation of the " University Extension" with the social development of the Colombian regions.

What exactly is wanted to study? THE PROBLEM

The need for universities to modify and build a new assembly according to the requirement of the society, is not a recent phenomenon. From their earliest forms in Europe, towards the centuries XII and XIII in France and Italy, the objectives and orientation of universities responded directly to the interests of the social and geographical environment in which they were located (Harloe and Perry, 2004); however, they expand with a role limited to the teaching of existing knowledge. After a period of stagnation, specifically between the 16th and 17th centuries as a result of the European intellectual movement (Renaissance humanist, scientific revolution, reform, the triumph of the national State) and the difficult task of society to assume and encompass different disciplines, the University transformed its mission seeking a new social and institutional recognition, not only relating teaching processes, but also including the investigative function; to do so, it includes scientific methodologies developed in academic societies. This point of transition between the model of one University which only spreads knowledge, to another that also produces it, is known as

the academic revolution (Etzkowitz, 1990). These deep structural and organizational changes of higher education in this era not only respond to internal actors. It is especially important the new role assumed by the State as the main provider of financial resources, specifically with respect to activities related to university research.

However this revolution of the University, which add to the academic mission an investigative one, do not end there. The need in the last decade to find impactant solutions from different areas of knowledge as response to multiple governmental interests and socio-economic problems, resized the role of the University and added to the formation and research responsibilities the knowledge application, phenomenon called as the third mission (Zawdie, 2010). The "third mission" implies all University activities related to the generation, use, and application of knowledge in synergy with agents and external non-academic units (Molas-Gallart et al., 2002). This sum of actions does not imply a unilateral transformation, but on the contrary the deployment of a number of structures and specialized standards as possible conection bridges with external agents, among them the productive sector, Government and society.

The general concept of the "third mission" in the region, such as shaft integrator of the University with the productive sector and society, still has flaws and results more frequently and impact, is due to multiple causes, for example the weak relationship between universities and companies, research carried out in the University has relatively little time (few doctors, few resources for I+D, scientific infrastructure consolidation, etc.) (Zawdie, 2010). While in the developed countries, the third mission is seen as a function of thrust of knowledge between academia and the productive sector, in Latin America they talk about extension function, with an approach that attempts to represent and address the problems of the society and in some cases seeks to compensate the low presence of the State as a major player in the social and human development.

Even today, for the majority of Latin American universities, the activity of extension continues representing an excellent opportunity to transfer knowledge to their own ecosystem (technology transfer excluded), i.e. towards the society that cohabit, characterized, in many cases on communities with very low educational levels and large shortages of infrastructure and public services, and low technological level craft companies, to which the University can offer possible solutions and alternatives that

focus to the progress and improvement of the quality of life. This means that the new Alliance between University and region has begun to focus on the learning paths and communication between the different actors in order to take advantage of it and to apply the developed knowledge (Zawdie, 2010). This new model that requires universities to take on the role as a key contributor to the social development of the communities, will allow to approach from different disciplinary looks, global problems related to poverty, inequity and social inclusion, etc.

International Institutions such as the World Bank, OECD, UNDP, etc, as well as decision-makers in different countries, see as a great opportunity this new synergy between higher education institutions and regions, starting from the premise that development of knowledge in universities cannot grow in an isolated or little social goals-articulated ways. However, there are still not enough studies, especially in the Latin American context where the degree of integration and coordination among the extracurricular activities and the problems of communities and their characteristics as a region can be analyzed.

The present work aims to deepen the knowledge of the University extension activities as mechanisms used by the universities to provide knowledge or technical services to the local community that improve their quality of life, and to identify the actors and forms of interaction between the University and the local and regional communities in these processes. To do this, the National University of Colombia is taken as basis. Likewise, intends to visualize how the knowledge that comes from the University is articulated with the characteristics and social indicators of the individual context, study which is not identified any precedent in Colombia.

METHODS AND DATA ANALYSIS

This descriptive study is based mainly on two information sources. The first one has to do with university extension activities carried out by the National University of Colombia (NUC) from 2004 to 2015. It is important to point out that this is the largest university of Colombia with 453 academic programs (94 undergraduate programs, 101 specialization diplomas, 160 masters and 58 PhD programs), 1933 professors, and 730 research groups. It is also ranked among the first 20 universities (Scimago, QS, and ranking web).

According to the initial information obtained, NUC has 2,717 projects. However, data was filtered and categorized to identify exclusively those projects related to development and social improvement in the different geographical areas of the country (these geographical areas correspond to the political division of Colombia into 'states' ('departamentos'). As a result of the selection process, a data base was built by using information on 608 projects containing variables such as name and characteristics of the external financing source, subject of the contract or agreement, beginning and finishing dates, etc.

A second source of information is made up of some socioeconomic indicators relative to each state of the country (32 states), among which one can mention poverty and inequality indexes as well as monetary and multidimensional poverty, education coverage, and proxy health indicators such as maternal and infant mortality. Data was obtained from several government agencies such as the Colombia National Statistics Administrative Department (DANE), the Administrative Department of Science, Technology and Innovation (CT+i), and the National Ministry of Education. Initially, a strategy was used for handling information that consisted in assigning a quantitative value scale to each indicator in order to categorize the regions by using weighted means. Finally, the two information sources will be contrasted to visualize the degree of development of each state regarding the frequency of activities carried out by the University in each state.

EXPECTED RESULTS

This study is in the final stage of its development. However, it is intended for its results to be used as the main point of reference for designing, modifying, and evaluating policies and strategies proposed by the National University of Colombia as well as by other universities in the country. This would potentially contribute to comply with the indicators and overcome the challenges that Colombia faces with regard to regional development issues through the synergy university-region. Some of the questions to be dealt with are: 1) to identify the actors in the relationship university-region from the viewpoint of extension activities, 2) to establish how the University's policies, results, and interests are articulated with the needs of each Colombian state, 3) to identify synergies between the University's policies and the regional and national government, 4) to generate information that facilitates the decision making on institutional policies

and plans, and 5) to reflect on the dynamics of freedom in knowledge generation at the University and the needs of the surrounding regional environment.