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International Participation of Subnational Actors: Contributions to Study University

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Abstract

International participation of subnational actors is a contemporary issue that emerged mainly as a result of globalizer processes, national transformations and redefinition of decentralization processes experienced in the past three decades. These processes have led to the external participation of different actors, such as companies, cities, universities, civil society organizations, subnational government institutions and even individuals. However, the process of international involvement of these actors in the same national and international scene has been diverse.

Within the variety of actors above mentioned, it has become particularly active the international involvement of universities. This paper presents a framework of analysis to explain the reasons why certain universities have achieved a certain level of internationalization. It seeks to link the development of the international dimension to the capabilities of the institution; specifically this framework considers as relevant the notion of “state capacity”.

Keywords: *International Participation- Subnational Actors – University- State Capacity.*

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Introduction

International participation of subnational actors is a contemporary issue that emerged mainly as a result of globalizer processes, national transformations and redefinition of decentralization processes experienced in the past three decades. These processes have led to the external participation of different actors, such as companies, cities, universities, civil society organizations, subnational government institutions and even individuals. However, the process of international involvement of these actors in the same national and international scene has been diverse.

Within the variety of actors above mentioned, it has become particularly active the international involvement of universities. To analyze this participation, this paper employs the concept of “internationalization of university” understood as “the process of introducing the international dimension in the culture and corporate strategy, functions, training, research and extension and projection of the supply and capabilities of the university” (Sebastián, 2004: 16)¹. This approach highlights the dual character of internationalization of university, as a process that is expressed inside and outside the university.

Specifically, this paper is based on the following research question: What elements can explain a greater or lesser degree of internationalization of a university? In recent decades, universities have made a significant effort towards developing international dimension of its main activities. In the context of these changes, both the field of Education Sciences and the field of Social Studies of Science and Technology have developed diagnostics, analysis and recommendations on the international dimension of universities. This paper presents a framework of analysis to explain the reasons why certain universities have achieved a certain level of internationalization. Thus, it seeks to link the development of the international dimension to the capabilities of the institution.

First of all, this article presents a brief reference to the historical development of international dimension of universities, particularly in the last two decades in Latin America. Secondly, it presents the main areas of knowledge and approaches that have explored this topic and later it explains the theoretical concepts employed in this work. Then it describes the proposed methodology that includes an exploratory phase, a design phase of analytic dimensions and phase of comparative analysis. Finally, it presents the concluding considerations of the work.

International dimensions of universities from an historical perspective

The international dimension has been part of universities from its origins. Since the 12th century, the seminars were offered in Latin as a common language, students came from different nations and professors often circulated in the international field. Even groups of students and professors travelled to other countries because of insuperable institutional conflicts (Romero Zertuche, 2009). From the creation of Modern State until the 20th century, the new universities emerged with the mission of responding to the problems and interests of the national context. In this period, international

dynamics were related to the exportation of the European university model to the rest of the world (García Guadilla, 2005).

The first half of the 20th century was marked by the two World Wars as the main cause of mobility of professors, mostly from the European continent to the United States of America. Since the second half of the century, under the Development Paradigm, there was a high mobility of students from developing countries (in the South) to the developed ones (in the North). On the one hand, some exchange programs were the result of international cooperation agreements in both ways. On the other hand, particularly in Latin America, university international links were marked by involuntary exiles because of political and economic crisis and individual interests. So the process was spontaneous, situational, based on free will and personal contacts rather than a result of its planning, financing and evaluation process (Didou Aupetit, 2007).

From the past two decades, the reference to international issues of the universities is related to processes of very different magnitudes to those of earlier times. The phenomenon of globalization has modified the internationalization process of the universities in five key elements: the emergency of knowledge society, the new technologies of information and communication, the market economy, the trade liberation and new forms of governance (Hans de Wit, 2005). The contextual factors driving this new phase of internationalization are: the growing demand for higher education because of the requirement of “lifelong learning” and “lifelong education”, the importance of advanced knowledge, the specialization in different areas of knowledge making it impossible for a country to produce, develop and train human resources in all knowledge areas by itself, the integration process of higher education and the homologation of degrees in different parts of the world.

While these types of reasons have been reviewed and modified, it is essential to understand that there are differences in the motivations and degrees of internationalization of universities in developing countries. In these countries, certain issues related to the internationalization of universities have become the subject of debate: the brain drain (Gascón Muro, Cepeda and Doval, 2009), the determination of the agendas and techniques of research by foreign scientific centers (Kreimer, 2006) and the inclusion of education in the General Agreement on Trade in Services of the World Trade Organization (Yarzabal, 2005), are distinctive issues with implications for developing nations. However, the possibility of responding to the growing demand for higher education, the access to funding sources and research lines that are not developed in the local context and a greater understanding between cultures and nations are positive aspects of internationalization.

These changes regarding the process of international participation of universities have made it necessary to readjust the theoretical and methodological approaches to address the phenomenon. Below, there is a review of literature on this subject; in particular, focused on reflection on the Latin American region due to our object of study is the internationalization of universities located in this part of the world.

A literature review on international participation of universities

International participation of universities from Latin America has been approached from different perspectives that can be grouped into two broad analytical fields: Educational Science and Social Studies of Science and Technology. In turn, from the point of view of each approach, there are several empirical studies which analyze in particular some dimensions of the phenomenon.

Before presenting the literature on internationalization of Latin American universities it is necessary to define some central characteristics of this institution. First, universities are autonomous institutions; they have “the power to self-government, takes domestic policy decisions, distribute its own resources and determine objectives of its activity” (Vaccarezza, 2006: 35)ⁱⁱ. An important event in the history of Latin America University is the Cordoba Reform in Argentina in 1918, which led to the promotion of co-government and university autonomy. Second, as a state agency, it is subordinated to the laws of budget and fiscal expenditures and it can be controlled by relevant bodies at the national level. Since the end of the twentieth century, the State began to play an important role in evaluation and incentive mechanisms applied to universities, modifying historical funding mechanisms not linked to accountabilityⁱⁱⁱ. Finally, the Latin American higher education system is characterized by the existence of public and private universities; private sector development primarily occurred during the 1980s, in the period denominated as the “Second Higher Education Reform”.

From the field of Educational Sciences, internationalization of the university has been studied in the context of changes produced by processes of “globalization” and the growing importance of knowledge. First, globalization implies the increasing internationalization of the service sector and transnational distribution of free people, investment, ideas, values, technologies, and also of higher education or transnational education (Brunner, 2000; Rama, 2003). Second, globalization requires the training of professionals able to act in the new global reality and respond to the demands of lifelong learning. In this sense, the internationalization of university provides access to more and different areas of knowledge and training in a global perspective (Gacel-Avila, 2000). Also, the increasing importance of advanced knowledge, expertise in different areas of knowledge and the processes of integration and standardization of degrees in different parts of the world have given impulse to the internationalization of higher education and, in particular, to the university.

In particular in Latin America it has been noted that the impact of globalization on education refers to a more tight space than those related to “big impact”, it is related to the realm of immediate or future contexts within which education developed. It is claimed that the educational systems in Latin America face a profound and rapid transformation, at least on five dimensions: access to information, knowledge management, relationship with the labor market, use of technology and culture socialization (Brunner, 2000).

In this regard, internationalization has been linked more to the economic aspect of globalization and at least in three senses. First, it is mentioned the increasing internationalization of service sector and the free movement of individuals, money, knowledge, values and technologies (Rama, 2003). It is believed that globalization modified higher education leading to a process of transnationalization and creating a new teaching method in which a student is in a different country from that to which the institution that provides the educational services belongs to. Among the cases of

transnational education, the most frequent is the installation of foreign institutions locations; the emergence of joint programs between local and foreign universities with shared degrees and twin programs (Marquis, 2002). Second, it is highlighted the increased requirement of training of professionals able to act in the new global reality, in order to respond to the continuing education requirements (Gacel-Ávila, 2000). Third, the internationalization of universities is related to the growing importance of the quality of higher education and to the impact of information and communication technology. The development of these technologies is influencing basic aspects of social relations. One of the most notable consequences of using these new technologies is the change in the conception of space, time and cost. The space is distorted as new technologies transcend borders, approaching events and people instantly. The time is modified by the predominance of the immediacy that fosters technology on line. The cost has been reduced because of the shortest time needed to store, process and transmit information (Marquis, 2002).

In this line, the internationalization strategies of universities in the region have been studied in the context of globalization, but also in the context of regional integration (Zarur Miranda, 2008); both phenomena lead to a diversification of suppliers (Didou Aupetit, 2005) and modalities of providing education (Didou Aupetit, 2006), issues that demonstrate the need for convergence of different systems (Fernandez Lamarra, 2004; Theiler, 2005; Mainero, 2009). Thus, it has been exposed that internationalization in Latin America has its own characteristics (Knight, 2005; Gazzola y Didriksson, 2008; Fernandez Lamarra, 2010).

From a critical point of view, it has been warned the specific effects of the commercialization of education services across borders, over both Latin American countries in particular and the South in general. In this regard, it is noted that the internationalization of higher education has become largely a commercial matter (Guadilla Garcia, 2005; Yarzabal, 2005). Thus, trade liberalization of higher education brings with it the creation of a market in which a few transnational corporations from northern countries control the world market of education (Gascón and Cepeda, 2008), offering, as "diploma factories", poor quality academic programs, very profitable from the economic point of view. Given this prevailing trend, current experiences are rescued as examples of "internationalization with cooperation" (Garcia Guadilla, 2005). That is, the commitment to 'regionalization' of international cooperation in education (Yarzabal, 2005).

In the field of Social Studies of Science and Technology, the international dimension of universities is associated to the dynamics of training of human resources in science and technology, to the nature of the research process and dissemination of scientific knowledge, and to the generation and transfer of technology (Manual de Santiago, 2007). On the other hand, it is recognized the growing importance of international dimension in the production and use of scientific and technological knowledge, associated with the emergence of new information and communication technologies, the emergence of new financing modalities requiring as a condition the participation of different countries in joint research projects and the impetus given to the "internationalization of technological innovation" by the private sector (Licha, 1997; Sebastian, 2004; Echeverria, 2005).

In the case of Latin America, various studies acknowledge the influence of the international dimension in the origin and development of the scientific community as well as in the origin of scientific and technological institutions (Vessuri, 1994; Oteiza, 1992; Dagnino y Thomas, 1999; Piñón, 2004 y Albornoz, 2004). Other studies analyze the effects of the participation of local researchers in the Framework Programme of the European Union, typical examples of the international organization of research in the recent decade (Bonfiglioli y Mari, 2000; Gusmão, 2000; Cuadros *et al*, 2008).

Kreimer (2006) analyzes the role of international human resource training in the creation of laboratories and research groups in Argentina. During a first stage, the author points out the importance of linking to the establishment of new centers, as well as to the establishment of nonexistent local research lines; while in the second phase, he affirms that stays abroad work as a complement to the initial local training. Also, it has been considered the size of the prestige of studying abroad; this experience provides opportunities to publish and linkages that allow to gain prestige and recognition within the national scientific community (Gerard and Grediaga Kuri, 2009). Sebastian (2003) also argues that education abroad encourages further scientific exchange with institutions and research groups; however, this author emphasizes the moment of return of new doctors. In this regard, there is a possibility that scholars who study or work abroad do not return to their country of origin after completing their training period.

Meyer *et al* (1998) highlight the existence of 'intellectual diaspora networks' characterized by the mobilization and connection of expatriate scientists with their native country in order to exploit their knowledge, socio-professional networks and human resources, materials and cognition associated with them. In other cases, this phenomenon is called "scientific talent and/or technology loss" because of the non-rehabilitation of human resources in the country of origin and the loss of contact between them (Albornoz y Luchilo, 2002). The scientific research on migration centrally addresses the causes and consequences of the permanence of researchers outside the country of origin from a plural perspective that considers personal, economic, professional and political factors (Didou Aupetit y Étienne, 2009).

In sum, both approaches have advanced in the study of the international dimension of universities. On one hand, it has been noticed the emergence of different mechanisms and transnational education suppliers in the area of higher education in the context of discussion of the consequences of globalization in Latin America. On the other hand, studies have made a progress in the conceptualization of this issue, which has revealed different motives and ways related to the process of internationalization of science. In this regard, this paper presents a proposal to address the capacities for internationalization of universities through the presentation of a model of analysis to explain what the reasons for a higher or lesser degree of internationalization of an institution are.

A theoretical perspective on international participation of universities: internationalization and state capacities

Internationalization is often seen as "any systematic effort regarding to sensitize higher education about the imperatives and challenges emerged with globalization of society, economy and labor markets" (Van der Wende in Bernal, 1997: 34)^{iv}. This definition highlights two key issues: the nature of internationalization as a policy -not as mere

sporadic response- and the new role of knowledge in the society and in the world economy.

Other authors have gone beyond the phenomenon of globalization and have proposed to understand the internationalization of higher education as the process of introducing the international dimension in the culture and corporate strategy, functions, training, research, extension and projection of the supply and capabilities of the university (Sebastián, 2004). This view highlights a dual character of the internationalization of university, as a process that is expressed inside and outside of universities.

Thus, the internationalization of universities is seen as a permanent process that exceeds specific events and isolated activities of university life (Sebastian, 2004; Knight, 1999; Beneitone, 2008). Rather, it is understood as a cycle of successive acts integrated into the institutional daily life, as well as a process that requires the involvement and participation of the entire university community. In this regard, all academic departments have to be convinced of the necessity and benefits of internationalization; accordingly, it is required a fluid interaction of academic and administrative entities. Internationalization also involves the formulation of plans and the design of strategies regarding the international dimension of the institution. The internationalization of universities implies a new management style, a change in the institutional culture, a reformulation of the mission and functions of the university, as well as a change in the relationship between its components, leaving the individual vision and adopting an institutional vision of the international dimension.

This work considers that the notion of “state capacity” is relevant to analyze the internationalization of the university. Research around state capacities arose in the context of “return” of the state at the center of both the political arena and the public policy analysis (Evans, 1995). State capacity is defined as “the ability to perform appropriate tasks effectively, efficiently, and sustainably” (Hildebrand y Grindle, 1994: 15). Extending the concept, Repetto understands that “the state capacity is expressed in concrete decisions and actions related to a general objective (social value), defined and constantly redefined through political interaction of individuals or interest groups, ideologies and, above all, different allocations of resources” (2007:43)^v. This conception of state capacities is considered as part of the framework for a causal analysis of international participation of subnational entities, in this case, public universities.

In the particular case of this research, the concept of state capacity is used to analyze how the university “generates” internationalization policies, since, as Sckopol has noted, “the most fruitful studies of the capabilities of the state tend to focus on areas of concrete political action” (1985:25)^{vi}; even more, “Only through different case studies it would be possible to (somebody may) set a "map" to distribute the strengths and weaknesses of the state apparatus to carry out their own objectives” (Alonso, 2007: 26)^{vii}.

Additionally, Alonso presents a distinction within state capacities considering that they contain two key dimensions: “On one side, the technical and administrative capabilities, on the other, a relational dimension that refers to the government's relationship with the socio-economic environment” (2007:19)^{viii}. In this sense, the study focuses on “inside” and “outside” capacities. These dimensions consider the internal management of the institution such as “The ability to advise, formulate and implement policies possessed by the administrative machinery, interacting with other public and

private” (Rodríguez-Gustá, 2004: 7)^{ix}. Thus, the explanatory factor of state capacities is subdivided in two dimensions:

- a) Technical and administrative capacities
- b) Relational capacity

The first dimension refers to the capacities of management, policy design, planning process, regulations, budget and evaluation. It seeks to investigate the organization of the university in relation to human resources, budget resources and infrastructure available to take decisions, implement and evaluate the internationalization process.

The second dimension is a central issue in building a framework for analyzing the degree of internationalization of universities. The relational dimension of state capacity is considered as the socio-cultural and socio-economic local environment, including the interaction of universities with other actors in the establishment of policies and strategies.

First, the analysis considers the socio-cultural scenario of the territory that includes the range of public and private actors, as well as channels of communication and connection (Evans, 1995) with active participation in the process of internationalization of universities, for example, science and technology agencies, international networks of universities, companies with international participation, among others. Second, it considers the economic and productive characteristics of the environment. Similarly, the second pillar refers to the joint participation of the university office and State agencies, the link of the office with local, regional and national actors in the generation of internationalization proposals and the connection of universities with non-governmental actors with international concern.

Thus, this approach will allow explaining how and what kind of features of public universities, grouped under the concept of “state capacity” influences the variation of its international participation.

A methodological perspective on international participation of universities: the ‘Index of internationalization’

Analyses on the subject of international involvement of universities have shown that the phenomenon of internationalization occurs in most of higher education institutions in varying degrees. As it was mentioned, there have been some diagnoses that describe policies, structures and programs in various levels of higher education system and in university organizations, while this paper seeks to establish an explanatory relation between the skills that a university has to perform, an internationalization strategy and its level of development.

This requires the identification of the internationalization strategy of the university. In order to achieve this aim this paper inquires about the program structure (Knight, 1999) distinguishing three areas of university programs for the internationalization of different functions.

The first area is the academic, in which there are activities such as student exchange programs, studying a foreign language, the internationalization of curriculum, completion of study/work abroad, hosting international students, joint master and doctoral degrees, programs of mobility of academic staff/administration. A second area is research and

international collaboration. The activities that can be developed are thematic and area centers, joint research projects, conferences and seminars, joint publication of articles and essays, international research agreements, exchange programs for graduate students and researchers. In the field of external relations and services activities are community projects and partnerships with nongovernmental groups or private sector, international development projects, special training programs/contract beyond the borders, link between development projects and training in teaching and research.

As a next instance of this research, it is proposed the designing of a typology that reflects the diversity of the profiles of internationalization, based on an index that marks the degree of international participation. The index will be constructed so that the parameters of greater or lesser participation are associated, first, to the existence or absence of internationalization strategies; secondly, to the type of area in which internationalization programs take place (academic, research , extension); finally, it will take into account the diversification of the various areas in the selected universities.

This index is called Index of internationalization, and it will comparatively establish the variation between public universities and lead to the construction of a typology that reflects the groupings established around internationalization of each university:

- University without Internationalization: lack of internationalization strategies.
- University with intermediate Internationalization: existence of a single type of internationalization activity (academic, research or extension).
- University with high Internationalization: existence of at least two internationalization activities (academic, research, extension).

This approach leads to another of the major questions of the research: to explain the variability in the level of international participation. To achieve this aim, the analysis will focus on the main actor in the research, the public university and its characteristics, considering that this set of factors is contained in the concept of state capabilities.

Therefore, this research takes into account other causes poorly developed in the study of the subject, taking as the dependent variable the international participation of the university and, as the independent variable, the type of state capacities developed.

As it was mentioned in the theoretical framework, the variable state capacities are subdivided into two dimensions: Technical and administrative capacities and Relational capacities. In regards to this investigation, the analysis of the first dimension includes consideration of the internal organization of the university in relation to policies of international links (organizational, offices related to internationalization), human resources (recruitment, training) and infrastructure and budget allocated to the specific area.

In relation to the analysis of the university through its relational capacity, it is considered the cultural and socioeconomic environment where the university has influence. In this regard, this paper takes into account the socio-cultural environment and the public-private links with active participation in the process of internationalization of university. This universe is covered by both the range of public and private actors as well as regional and national agencies that promote the internationalization of universities, and

the communication channels with active participation in the process of internationalization of universities.

Table 1: Explanatory factor, dimensions and their indicators

| Explanatory Factor | Dimensions | Sub-dimensions | Indicators |
|---------------------------|--|---|---|
| State Capacities | Technical- Administrative Capacity | Internal Organization of the organism for International Relations | Structure related to the internationalization of university |
| | | | Location in the Organization |
| | | | Recruitment and human resources training |
| | | | Budgetary resources |
| | | | Infrastructure |
| | Relational Capacity | Organizational Environment | Instruments and funding for internationalization from public and private entities |
| | | | Networks and international associations of universities |
| | | | Participation of non-profit organizations with international dimension /composition |
| | | | Participation of for-profit organizations with international dimension/composition |
| | | | |

To analyze the causes of the variation in international participation of universities, this proposal will recuperate the dimensions of state capacities and through the types of universities in their international participation, it will lead to a comparison by the method of agreement and difference following the logic of Smith pointed out by Mahoney (2004), in order to give consistency to the necessary cause established. Thus, the research aims to build on an analysis of the method of agreement (universities with international participation as a whole) and difference (universities that have and do not have international participation).

As regards the method of agreement, it seeks to explain and verify that the international participation of universities is related to a particular role of university and to a particular relationship with other actors (public-private). In contrast, the method of difference will search those cases where the dependent variable (international participation) has a different behavior or distribution (intermediate or non degree of internationalization). Similarly, it is found through this method that necessary causes, or state capacities, will be absent or will behave differently from those pointed out by the method of agreement. Therefore, by performing the method of agreement and difference it will be verified if the development of certain types of state capacities is necessary for a higher degree of internationalization of universities.

Also, to complement this analysis and to verify that these factors are the cause of international links, this work will use a technique of regression. Through this technique, it will be analyzed if the change in the international participation of universities corresponds to the type of state capacities developed by these actors. In this way, variables will be combined -the dependent variable regarding international performance and the independent one regarding state capabilities and its subdivisions- through regression analysis to determine if "The variability of the dependent variable can be explained by the independent variables " (Cortés and Rubalcava, 1991:250)^x. Thus, it follows that for each level of internationalization (high, intermediate, null) there will be different types or degrees of state capacity in universities.

Concluding remarks

This paper has attempted to reconstruct the process of finding an appropriate analytical framework to the study of the internationalization of the university. To explore what factors explain a greater or lesser degree of internationalization of the university, it has been identified useful analytical categories and methodological tools. After inquiring in the fields of Educational Science and Social Studies of Science and Technology it has been revealed the scarcity of analytical tools to explain an empirical process of internationalization of the university. Thus, in this paper it has been recovered contributions from Political Science, particularly those that explore "state capacity".

In this case, this notion is proposed to analyze how universities generate internationalization policies. In turn, the notion of state capacities is divided into: a) technical and administrative capacities, and b) relational capacity. Thus, two dimensions have been proposed to try to explain how and what type of characteristics determines the variation in international participation of universities.

Moreover, after considering the existence of different levels of internationalization, it has been proposed a typology based on an index of internationalization. Thus, in addition to trying to explain the causes of that phenomenon, the framework of analysis try to presents the factors that explain the different levels of international participation. Finally, through the method of agreement and difference it will be determined which state capacities explain the various levels of international participation.

This approach contributes in a double sense, theoretical and methodologically. First, it highlights the importance of generating knowledge about the internationalization of national universities and of making a relevant and concrete contribution to the study area, combining administrative level analysis and relational level. It also seeks to expand the theories and studies relating to the management of the process of internationalization of universities that in general are focused on descriptive analysis, extending it to another type of explanation, through the deepening of the causes of variation in internationalization.

Second, the methodological contribution is determined from the generation of an Index of internationalization, which will allow highlighting the comparative variations on international participation, leading to the construction of a typology that reflects the groups established around the internationalization of universities.

It is also considered that one of the implications of the study will be to show the results that internationalization strategies generate on the academic activities of

universities. In that sense, it is considered important to assess the impact on the quality of the academic activities of the institution and on the human resource development from the implementation of internationalization strategies, taking into account qualitative factors (perception of involved actors) and quantitative (results).

References

- Albornoz, M. and Luchilo, L. (2002) El talento que se pierde. Aproximación al estudio de la emigración de profesionales, investigadores y tecnólogos argentinos. Documento de Trabajo N° 4, Centro REDES.
- Albornoz, M. (2004) Política científica y tecnológica en Argentina. In: Organización de Estados Iberoamericanos Globalización, Ciencia y Tecnología, Vol. II, Available at: <http://www.oei.es/salactsi/albornoz.pdf> (accessed 12 October 2011)
- Alonso, G. (2007) Elementos para el análisis de capacidades estatales. In Alonso, G (Editor) Capacidades estatales, instituciones y política social. Buenos Aires: Prometeo.
- Beneitone, P. (2008) La Internacionalización del Currículo en América Latina y el Caribe. CXIX Consejo Nacional de Rectores, Foro sobre Internacionalización de la Educación Superior. Popayán, Universidad del Cauca, 6 y 7 de mayo.
- Bernal, M. (2007) Internacionalización de la Educación Superior. Córdoba: Editorial de la Universidad Católica de Córdoba.
- Bonfiglioli, A. and Mari, E. A. (2000) La cooperación científico-tecnológica entre la Unión Europea y América Latina: el actual contexto internacional y el Programa Marco de la Unión Europea. Revista Redes, Vol. 7, N° 15.
- Brunner, J. J. (2000) Globalización y el futuro de la educación: tendencias, desafíos, estrategias". Seminario sobre Prospectivas de la Educación en América Latina y el Caribe. Santiago de Chile: UNESCO.
- Cortés, F. and Rubalcava, R. M. (1991) Consideraciones sobre el uso de la Estadística en ciencias sociales: estar a la moda o pensar un poco. México, D.F.: Centro de Estudios Sociológicos, El Colegio de México.
- Cuadros, A. Martínez, A. and Torres, F. (2008) Determinantes de éxito en la participación de los grupos de investigación latinoamericanos en programas de cooperación científica internacional. Revista Interciencia, Vol. 33, N° 11.
- Dagnino, R. and Thomas, H. (1999) La Política Científica y Tecnológica en América Latina: nuevos escenarios y el papel de la comunidad de investigación. Revista Redes Vol. VI, No. 13.
- De Vit, H. Jaramillo, I. Gacel Ávila, J. and Knight, J. (Ed.) (2005) Educación Superior en América Latina. La dimensión Internacional. Colombia: Banco Mundial-Mayol Ediciones.
- Didou Aupetit, S. (2005) Internacionalización y proveedores externos de educación superior en los países de América Latina y en el caribe: principales problemáticas. México: DIE/CINVESTAV.

- Didou Aupetit, S. (2006) Internacionalización de la educación superior y provisión transnacional de servicios educativos en América Latina: del voluntarismo a las elecciones estratégicas. Seminario internacional IESALC – UNESCO/Conferencia de Rectores. Panamá 17 de marzo.
- Didou Aupetit, S. (2007) La internacionalización de la educación superior en América Latina: oportunidades y desafíos. Córdoba: Conferencia dictada en el Pabellón Argentina de la Ciudad Universitaria, 21 de Agosto.
- Didou Aupetit, S. and Gérard, E. (Editores) (2009) Fuga de cerebros, movilidad académica, redes científicas. Perspectivas latinoamericanas. México: IESALC-Cinvestav-IRD.
- Echeverría, J. (2003) La revolución tecnocientífica. Madrid: Fondo de Cultura Económica de España.
- Emiliozzi, S. (2011) Políticas en ciencia y tecnología, definición de áreas prioritarias y universidad en Argentina. Revista Sociedad N° 29/30, Bs. As.
- Evans, P. (1995) *Embedded Autonomy. States and Industrial Transformation*. New Jersey: Princeton University Press.
- Fernández Lamarra, N. (2004) Hacia la convergencia de los sistemas de educación superior en América Latina. Revista Iberoamericana de Educación, Número 35.
- Fernández Lamarra, N. (2010) Hacia una nueva agenda de la educación superior en América Latina. México: ANUIES.
- Gacel Ávila J, Jaramillo I, Knight, J. and De Vit, H. (2005) Al estilo latinoamericano: tendencias, problemas y direcciones. In De Vit, H. Jaramillo, I. Gacel Ávila, J. and Knight, J. Educación Superior en América Latina. La dimensión Internacional. Colombia: Banco Mundial-Mayol Ediciones, pp. 352-380.
- García de Fanelli, A. M. (2007) La reforma universitaria impulsada vía el financiamiento: alcances y limitaciones de las políticas de asignación. Revista Espacio Abierto, año/vol. 16, número 001.
- García Guadilla, C. (2005) Complejidades de la globalización e internacionalización de la educación superior. Interrogantes para América Latina. Cuadernos del Cendes, año 22. N° 58, Tercera Época. Venezuela, pp. 1-22.
- Gascón Muro, P. y Cepeda Dovala, J. L. (2008). Globalización y mercantilización de la educación. Nuevos retos para los Estados y las universidades públicas. Veredas, Número Especial, México, pp. 7-19.
- Gascón Muro, P. and Cepeda Dovala, J. L. (2009) La internacionalización de la educación y la economía del conocimiento: la fuga de cerebros como política. Reencuentro, N° 54.
- Gazzola, A. L. and Didriksson, A. (2008) Tendencias de la Educación Superior en América Latina y el Caribe. Caracas: IESALC-UNESCO.
- Gérard, E. and Grediaga Kuri, R. (2009) ¿Endogamia o exogamia científica? La formación en el extranjero, una fuerte influencia en las prácticas y redes científicas, en particular en las ciencias duras. In Didou Aupetit, S. y Gérard, E. Fuga de

- cerebros, movilidad académica, redes científicas. *Perspectivas latinoamericanas*. México: IESALC-Cinvestav-IRD, pp. 137-160.
- Gusmão, R. (2000) La implicación de los países latinoamericanos en los programas europeos de cooperación CyT con terceros países. *Revista Redes*, Vol. 7, N° 16.
- Hilderbrand, M. y Grindle, M. (1994) *Building sustainable capacity: challenges for the public sector*. Cambridge: Harvard Institute for International Development.
- Knight, J. (1999) *Quality and Internationalisation in Higher Education*. Francia: Programme on Institutional Management in Higher Education, OCDE.
- Knight, J. (2005) Un modelo de internacionalización: respuesta a nuevas realidades y retos. In De Vit, H. Jaramillo, I. Gacel Ávila, J. and Knight, J. *Educación Superior en América Latina. La dimensión Internacional*. Colombia: Banco Mundial-Mayol Ediciones, pp. 1-39.
- Kreimer, P. (2006) ¿Dependientes o Integrados? La ciencia latinoamericana y la nueva división internacional del trabajo. *Revista Nómadas*, N° 24, Universidad Central de Colombia.
- Licha, I. (1997) Las nuevas políticas científicas para la competitividad. El caso latinoamericano. In Sutz, J. *Innovación y desarrollo en América Latina*. Caracas: Nueva Sociedad, pp. 135-149.
- Mahoney J (2004) *Comparative Historical Methodology*. *Annual Review of Sociology* 30.
- Mainero N (editora) (2009) *Integración, Cooperación e Internacionalización de la Educación Superior*. San Luis: Nueva Editorial Universitaria
- Red Iberoamericana de Indicadores de ciencia y tecnología (RICYT). (2007) *Manual de Santiago. Manual de Indicadores de Internacionalización de la Ciencia y de la Tecnología*. Available at: http://www.ricyt.org/index.php?option=com_docman&Itemid=2 (accessed 5 September 2012)
- Marquina, M. (2006) Tendencias recientes de los sistemas de evaluación de la educación superior en el actual escenario internacional. Un nuevo “round” del Estado evaluador. *Avaliação (Campinas)* [online]. Vol.11, n.04.
- Marquis, C. (2002) *Nuevos proveedores de educación en Argentina y Brasil*. Buenos Aires: IES/2002/ED/PI/6.
- Meyer, J. B. Kaplan, D. and Charum, J. (1998) El nomadismo científico y la nueva geopolítica del conocimiento. In: *Organización de Estados Iberoamericanos Globalización, Ciencia y Tecnología*, Vol. II. Available at: www.oei.es/salactsi/meyer.pdf (accessed 10 September 2012)
- Oteiza, E. (1992) *La Política de Investigación Científica y Tecnológica Argentina: Historias y Perspectivas*. Buenos Aires: Centro Editor de América Latina.
- Piñón, F. (2004) *Ciencia y tecnología en América Latina: una posibilidad para el desarrollo*. In: *Organización de Estados Iberoamericanos Globalización, Ciencia y Tecnología*, Vol. II. Available at: <http://www.oei.es/oeivirt/temasvol2.pdf>

- Rama, C. (2003) La educación transnacional: el tercer shock en la educación superior en América Latina. In VIII Seminario Internacional Cruzando fronteras, nuevos desafíos para la educación superior. Santiago de Chile: Consejo Superior de Educación.
- Repetto, F. (2007) Capacidad estatal, institucionalidad social y políticas públicas...O la búsqueda del “tesoro perdido” de la política social latinoamericana. In Alonso G. (Editor) Capacidades estatales, instituciones y política social. Buenos Aires: Prometeo, pp. 41-84.
- Romero Zertuche, R. Mureddu Torres C (2009) Internacionalización y educación ¿Semántica o política? Reencuentro, Núm. 54, abril.
- Rodríguez-Gustá, A. L. (2004) Capacidades estatales: reflexiones en torno a un programa de investigación. In IX Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública, Madrid, España. 2-5 de noviembre.
- Sebastián, J. (2003) Estrategias de cooperación universitaria para la formación de investigadores en Iberoamérica. Madrid: Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura (OEI).
- Sebastián, J. (2004) Cooperación e internacionalización de las universidades. Buenos Aires: Biblos.
- Skocpol, T. (1985) Bringing the State back in strategies of analysis in current research. In Evans P, Rueschemeyer P and Skocpol T Bringing the State Back in. Oxford: Cambridge University Press.
- Theiler, J. (2005) Internacionalización de la educación Superior en Argentina. In De Vit H, Jaramillo I, Gacel Ávila J and Knight J Educación Superior en América Latina. La dimensión Internacional. Colombia: Banco Mundial-Mayol Ediciones, pp. 71-112.
- Vaccarezza, L. S. (2006) Autonomía universitaria, reformas y transformación social. In Vessuri H Universidad e investigación científica. Buenos Aires: CLACSO, Consejo Latinoamericano de Ciencias Sociales.
- Vessuri, H. (1994) La ciencia académica en América Latina en el siglo XX. Revista Redes, Vol. 1, N° 2.
- Yarzabal, L. (2005) Internacionalización de la educación superior: de la cooperación académica al comercio de servicio. Cuaderno de Investigación en la Educación, N° 20, Puerto Rico.
- Zarur Miranda, X. (2008) Integración regional e internacionalización de la educación superior en América latina y el caribe. In Gazzola, A. L. and Didriksson, A. (2008) Tendencias de la Educación Superior en América Latina y el Caribe. Caracas: IESALC-UNESCO.

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- ⁱ From the original: “proceso de introducción de la dimensión internacional en la cultura y estrategia institucional, en las funciones de la formación, investigación y extensión y en la proyección de la oferta y capacidades de la universidad” (Sebastian, 2004: 16).
- ⁱⁱ From the original: “la facultad del autogobierno, la decisión de políticas internas, la distribución de sus propios recursos, la determinación de los objetivos de su actividad” (Vaccarezza, 2006: 35).
- ⁱⁱⁱ By the end of the twentieth century, new relationship between state and university in Latin America, generated a new concept to refer to the role of State in higher education: “Evaluative State” proposed by Neave and Van Vught (Cited in García de Fanelli, 2007). These changes relate to implementation of government mechanisms for evaluation and accreditation of university quality, of economic incentives for academic productivity, and of mechanisms for linking academics and extra-academic environment (Emiliozzi, 2008; Marquina, 2006) took place in countries like Venezuela, Mexico, Colombia and Argentina.
- ^{iv} From the original: “todo esfuerzo sistemático encaminado a sensibilizar la enseñanza superior a los imperativos y desafíos que surgen de la globalización de las sociedades, la economía y los mercados de trabajo” (Van der Wende in Bernal, 1997: 34).
- ^v From the original: Repetto “visualiza a la capacidad estatal expresada en decisiones y acciones concretas en función de un objetivo general (el valor social) a ser definido y redefinido de modo constante a través de la interacción de la política de individuos o grupos con intereses, ideologías y, sobre todo, diferentes dotaciones de recursos” (2007:43).
- ^{vi} From the original: “los estudios más fructíferos de las capacidades del Estado tienden a centrarse en áreas de actuación políticas concretas” (Sckopol, 1985:25).
- ^{vii} From the original: “sólo a través de distintos estudios de caso podrá configurarse un “mapa” que distribuya los puntos fuertes y débiles del aparato estatal para la realización de sus propios objetivos” (Alonso, 2007: 26).
- ^{viii} From the original: “por un lado, lo que hace a las capacidades técnico-administrativas; por otro, una dimensión relacional que se refiere a la relación del gobierno con el entorno socio-económico” (Alonso, 2007:19).
- ^{ix} From the original: “la capacidad de asesorar, formular e implementar políticas que tiene la maquinaria administrativa, relacionándose así con otros actores públicos y privados” (Rodríguez-Gustá, 2004: 7).
- ^x From the original: “la variabilidad de la variable dependiente se puede explicar a través de las variables independientes” (Cortés and Rubalcava, 1991:250).