

Epistemic Communities to Consolidate Educational Policies in the Internal Planning of Teacher Training College

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Abstract

An Epistemic Community, as defined by Adler and Haas (1992), is a network of professionals with wide academic recognition as experts in a particular field of knowledge, whose legitimacy allows them to influence the formulation and execution of policies in that field. There are several fields of knowledge in which the influence of Epistemic Communities has been successful (International Relations, Medicine, Environmental Care, among others), but as appears in the available studies, there has been little formation of these communities in the Educational field. In the case of the Teacher Training Colleges of Mexico, this experience also seems to be null, but if we analyze the foundations and implications of the Epistemic Communities, the formation and implementation of this type of communities can be a real opportunity to overcome problems of legitimacy and concreteness of the Federal Educational Policies that for these colleges have been formulated in our country in the most recent years. The first tasks that these communities would be the understanding and discussion of the problems of these type of colleges to enunciate alternative solutions, as well as the creation of an analytical framework for the interpretation of International, National and State Educational Policies so that, in their internal work, the Teacher Training Colleges can enunciate congruently their own institutional policies and in the short or medium term can actually put into practice these policies in aspects such as Research, Educational Innovation, Professionalization of their teachers, and the effective Use of Technologies (from ICT-Information and Communication Technologies to PET- Participation and Empowerment Technologies).

Keywords: Epistemic Communities, Educational Policies, Teacher Training Colleges and Institutions.

Introduction

The purpose of the discussion established in this paper is to explore the possibilities to link the educational policies of the Teacher Training Colleges and Institutions (TTCI), as Centro de Actualización del Magisterio (CAM) de Durango, Mexico, to the reality of these, and with it, review the role that could be carried out by Epistemic Communities (EC) in this type of institutions, which could represent a key point to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of the educational policies in the daily practice of these institutions.

Some of the first tasks that the EC could fulfill, would be the understanding and discussion of the problems of this particular type of institutions to enunciate alternative solutions, as well as the creation of an analysis framework for the interpretation of international, national and state educational policies so that, in their internal work, the TTCI can congruently enunciate their own institutional policies and that in the short or medium term, they can really put into practice this conglomeration of policies in aspects such as research, educational innovation, professionalization of their teachers and the effective use of technologies (ICT -Information and Communication Technologies-, LKT -Learning and Knowledge Technologies-, TEP -Technologies of Empowerment and Participation-).

To guide the analysis of the joint and collaborative academic work that is done in the TTCI in Mexico, such as CAM, and the possibilities and relevance of forming Epistemic Communities in them, in the first part of this paper I perform an analysis of the state in that the research tasks are perceived, in addition to the development they have had and the work currently carried out by the Academic Teams (AT, Cuerpos Académicos –CA- in Spanish) in higher education institutions, in general, and in TTCI (the various colleges and institutions of updating the teaching profession).

In the second part of this writing I would like to discuss the definitions of the Epistemic Communities, its characteristics, functions and implications, as well as the impact they have had or could have on the formulation of policies and the improvement of governmental and / or institutional conditions, according to their fields of influence.

Research and Academic Teams in Higher Education and Teacher Training Colleges and Institutions

The research practice and the integration of Academic Teams (AT), whose main task is precisely and mainly this practice, as well as the collaborative dissemination of educational knowledge, have represented one of the most difficult policies to integrate into the dynamics of Teacher Training Colleges and Institutions (TTCI). The National Regulatory Reform in Mexico of 2009 practically forced teacher educators to include collaborative research in a formal way, a function that until then was carried out almost exclusively by universities and other specialized agencies. The TTCI had traditionally dealt with teaching practice (according to programs of study and updating, in addition to the orientations of the pedagogical paradigms in force). With some exceptions, the development of research and the dissemination of knowledge were practices unrelated to the majority of teacher educators, previous experiences were reduced to the teaching of research in the courses suggested in the degree programs and the accompaniment of the students in the construction of a 'recepional document' to reach the degree, which most of the time consisted of the application of some technical tools for the recovery and systematization of the teaching experience during the period of practice (Rodríguez Lares, Soto Soto & Alvarado Cabral, 2017). These recepional documents not only had problems of format, the design was diffuse, there was confusion in the use of the tools of the paradigms and methods, therefore, many of them could not be considered as academic research because they suffered the formalities and rigor to be. The panorama has been changing in the TTCI, since they have ventured into the offer of postgraduate programs where research begins to take a relevant role in the training of teachers as researchers. Even with everything, it seems that there is an epistemological, methodological, technical and practical breach with respect to the domain that the researchers of these institutions show in these aspects with respect to their university counterparts, who produce the largest volume of research in the different areas of knowledge in high education and at certain times, even regarding the educational problem in general. Rodríguez Lares, Soto Soto & Alvarado Cabral (2017) point out that a large part of the problem for the conformation of AT in TTCI has been the incipient culture and capacity for research and in general for academic productivity and publication.

If we review the years before the National Regulatory Reform, despite the fact that TTCI have been recognized as institutions of higher education for more than two decades, we can see how practices, cultures and academic habits have changed little. The 1984 Educational Reform assigned new responsibilities to academics, however, most were not prepared to assume the new functions, mainly research tasks (Rodríguez Lares, Soto Soto & Alvarado Cabral, 2017). Organizational changes were not made, also teachers' profiles didn't change because the current entry and promotion rules were not always respected. In fact, the homologation of 1984, that gave the TTCI status of higher education schools, left the academic processes intact; Santillán Nieto (n.d.) also points out that in general, these processes, as I mentioned, have been focused on teaching and institutionally do not develop functions of research and publication with the same intensity and continuity that do other Higher Education Institutions (HEI) in the country.

The actions for the strengthening of the TTCI, in an initial stage, had a starting point in 2005, in order to improve the competitiveness of the programs and close gaps; in 2008, the external evaluation of these institutions was initiated by the Inter-Institutional Committees for the Evaluation of Higher Education (CIEES in Spanish); the administration and the programs offered by the TTCI began to participate in the Program for the Improvement of Teaching Staff (PROMEP in Spanish) in 2009; the projection was that by 2010 all public Teacher Training Colleges would be evaluated. The comprehensive Reform Program of Teacher Training Colleges 2007-2012 aimed to professionalize the teaching staff, create communities of professional practice to address the areas of mathematics, literacy, science, foreign and native languages; in addition to designing a program for teachers to receive specialized advice and enter graduate programs of quality. Advances, as pointed out by Santillán Nieto (n.d.), have been incipient in most of the areas and the quality training has simply remained a good intention. In fact, there is little information about the experience, favorable or unfavorable, in the TTCI with the creation of such communities of professional practice, it being understood that the way of working of the teaching teams remained, in the best of cases, in the collaborative work and, above all, in the work that was carried out by the teachers from the academies, with the students in the formative path Professional Practice, known as Observation and Teaching Practice, which has always been favorable but imprecise, if we limit ourselves in a timely manner to what the aforementioned reform indicated.

In this way, reviewing the various changes that have occurred in the recent years, from the curricular redesigns of the study programs and strengthening and transformation actions undertaken by the Dirección General de Estudios Superiores para Profesionales de la Educación (General Directorate of Higher Education for Education Professionals) (DGESPE), a body dependent on the Subsecretaría de Educación Superior (Subsecretariat of Higher Education) and rector of the work of the TTCl, when analyzing the main challenges that the teacher training of the 21st century enunciates in this normative entity precisely in its base document, the *Estrategia de fortalecimiento y transformación de escuelas normales (Strategy for the Strengthening and transformation of normal schools)* (SEP, 2017), where there is challenge III: “Convertir a las Escuelas Normales en Instituciones de Educación Superior orientadas a resultados y propiciar experiencias innovadoras mediante la sinergia con otras IES”¹ (p. 25); it contains as one of its specific challenges: “Aumentar y fortalecer la producción académica de las EN (Escuelas Normales), así como la difusión e intercambio de conocimiento entre éstas y otras IES”² (p. 25); thus, we can see the importance that is granted to the production and academic diffusion in the TTCl.

What is described in the previous paragraph is directly linked to the intervention areas that the Dirección General de Estudios Superiores para Profesionales de la Educación (DGESPE) marks to grant resources in support of the academic and management development of the TTCl, mainly from the *Plan de Apoyo a la Calidad Educativa y la Transformación de las Escuelas Normales (PACTEN) (Plan for Supporting Educational Quality and the Transformation of the Teacher Training Colleges)*. There are five areas of intervention, the first to be stated: “La consolidación de CA, la movilidad académica, los intercambios académicos y convenios entre IES a nivel nacional o internacional”³ (SEP, 2017, p. 66), with the first of the points mentioned, consolidation of Academic Teams (AT), “se busca integrar las funciones académicas de docencia, investigación y difusión como actividades cotidianas en las Escuelas Normales”⁴ (p. 67).

This importance that is given to the development of AT, having as essential objects the research and its publications, in Teacher Training Colleges, is reiterated in the *Guía de elaboración del PACTEN (Development Guide of PACTEN)* (SEP-DGESPE, 2016), where in congruence with the formulated in the strategy of strengthening and transformation of the TTCl, seven factors are established with very marked emphasis on the achievement of educational quality indicators. Thus, the first factor of such emphasis are Academic Teams (AT); the following are: 2. Tutoring, counseling and support programs for new students; 3. Follow-up programs for graduates; 4. National and international mobility programs; 5. Evaluation; 6. Teacher habilitation; 7. Training; and 8. Infrastructure. In the AT factor, the guide argues that what is sought is to respond to the need to strengthen the formation and consolidation of AT, to integrate them into the aforementioned academic functions: teaching, academic research and publication. Thus, it is clear that those that are normatively and primarily marked by the DGESPE, to raise significant quality indices in the TTCl, is the production and academic publication of the AT, without neglecting the work of teaching practice.

To describe more precisely the functions that AT must fulfill and what should be their desirable characteristics, it can be summarized that these are made up of a set of Associate Professors that share one or more lines of research and its objectives are mainly oriented to the generation and / or application of new knowledge (López-Velarde, n.d.). Thus, the AT would have to represent a sustenance in the institutional academic functions and with this contribute to the integration of their institutions to the Higher Education System of Mexico. In the Programa para el Desarrollo Profesional Docente (Program for the Professional Development of Teachers) (PROMEP) for universities and high schools, AT are categorized by degrees of consolidation, establishing three levels: Consolidated Academic Team (CAT), Academic Team in Consolidation (ATC) and Academic Team in Formation (ATF). The degree of consolidation of the AT is determined by the maturity of the Lines of Generation or Application of Knowledge (LGAC in Spanish), established jointly considering the common goals, where the academic products generated in relation to this line or lines constitute the evidence more consistent of the collegiate work that integrates the capacities and efforts of the AT. The aforementioned is consolidated at the moment that AT carry out applied research, or technological development and innovation in disciplinary or

¹ Convert Teacher Training Colleges into Higher Education Institutions oriented towards results and promote innovative experiences through synergy with other HEI.

² Increase and strengthen the academic production of Teacher Training Colleges, as well as the dissemination and exchange of knowledge between these and other HEI.

³ The consolidation of Academic Teams, academic mobility, academic exchanges and agreements between HEI at national or international level.

⁴ ... the aim is to integrate the academic functions of teaching, research and dissemination as daily activities in the Teacher Training Colleges.

multidisciplinary subjects and a set of academic goals and objectives. Additionally, López-Velarde points out that AT members attend, with teaching, educational innovation and intervention, educational programs related to their specialty at various levels.

In essence, the AT in the TTCl were established with the aim of fulfilling these three main criteria (Yáñez Quijada, Mungarro Matus & Figueroa López, 2014):

- Existence of common goals to generate knowledge in applied educational research and teacher training.
- Solidity and maturity of the Lines of Generation and Application of Knowledge (LGAC).
- Collegiate work in the design and application of innovative projects that generate knowledge in educational research and teacher training.

We could question here how far the TTCl have reached to meet the expectations about development of AT, at least for the case of the state of Durango, Mexico. According to PROMEP data, for January 2019, there are 6,107 AT throughout the country, of which 967 (15.8%) correspond to the area of Education, Humanities and Arts. Regarding the TTCl, at the national level there are 217 academic bodies (22.4% of the total area indicated and 3.6% of the global, very low percentage if we take into account that of 730 institutions registered in PROMEP, 260 are TTCl -35.6 % -). Of these, only two (0.9%) are Consolidated AT (from Escuela Normal de Sinaloa and Centro Regional de Formación Docente e Investigación Educativa del Estado de Chiapas), 34 (15.7%) are In Consolidation process and the rest 181 In Training (83.4%). To illustrate this data from TTCl with what happens at a global level -the total of Higher Education Institutions-, in the latter there are 1504 (24.6%) Consolidated AT, 1706 (27.9%) AT In consolidation and the rest 2897 (47.4%) In Training. I think that with these percentage differences the gap between the development of AT in HEI versus the presented in TTCl is clear. Thus, the comparison between HEI 24.6% versus TTCl 0.9% in Consolidated AT; 27.9% HEI versus 15.7% in AT In Consolidation; and 47.4% HEI versus 83.4% TTCl in AT In Training. The following table is highly illustrative:

Table 1. Comparative CA in ES and EN

	TTCl	Global HEI
Registered institutions	260 (35.6%)	730 (100%)
Amount of Academic Teams (AT)	217 (3.6%)	6107 (100%)
AT Consolidated	2 (0.9%)	1504 (24.6%)
AT In Consolidation	34 (15.7%)	1706 (27.9%)
AT In Training	181 (83.4%)	2897 (47.4%)

Source: Own construction based on PROMEP 2019 data.

In the specific case of Durango, Mexico, the data indicate that in its 5 Teacher Training Colleges and Institutions there are certified by PROMEP 11 AT (4.3% of the total of TTCl in all the country), all of this are In Training process:

- Benemérita y Centenaria Escuela Normal del Estado –ByCENED–: 3;
- Centro de Actualización del Magisterio –CAM–: 2;
- Escuela Normal Rural “J. Guadalupe Aguilera”: 5;
- Instituto de Estudios Superiores de Educación Normal “18 de Marzo” –IESEN–: 0; y
- Escuela Normal Urbana “Profr. Carlos A. Carrillo”: 1.

Here it is worth mentioning that for AT, at least in the TTCl, it has been has been requested from the national education authorities to do *Applied Research*, apparently the most desirable task in these institutions is the goal of solving a specific problem or specific educational approach (didactic, learning, of management). Few aspirations seem to be so that AT, made up of Professor Researchers, can produce *Basic Research* that seeks to achieve the purpose of obtaining and gathering information to generate a base of new knowledge that is added to the existing one.

In this way, what I have explained here serves as a framework to guide the analysis of joint and collaborative academic work done in TTCl, such as CAM Durango, and the possibilities and relevance of training Epistemic Communities in them. As we can see, the research tasks in TTCl have been entrusted as a priority to Academic Teams but then we should ask ourselves if the AT have had the expected impact on these institutions -at least quantitatively it seems that no-, besides

questioning, from the old experience that is had in TTCl of duplicity or ambiguity in the functions and attributes of individuals and work groups, if these would have the conditions to pass to the conformation of one or more Epistemic Communities (EC), which could contain, due to the previous experiences already mentioned, the interference between different work groups or, on the contrary, complementarity and support, depending on how we understand each other, as well as how we visualize the specific task and the field of influence that they would have as an academic group of researchers, professionals and / or experts.

The initial idea that I enunciate as a guide to the discussion in this paper is that it continues to require linking the Educational Policies of TTCl to the reality of these, and in that, what one or more EC could do in TTCl would be a key point to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of these policies in the daily practice of these institutions.

In order to discuss these possibilities, I will turn to the following section to discuss the Epistemic Communities definitions, their characteristics and implications, as well as the impact they have had or could have on the formulation of policies and the improvement of governmental and / or institutional conditions according to their fields of influence.

Definition and areas of influence of the Epistemic Communities

The EC, as pointed out by Marier (2008), have been formulated as a tool to understand international relations. This theoretical emphasis is placed on how ideas are transformed into policies, in the midst of international restrictions. Thus, Haas (1992, cited by Maldonado, 2005), the first theorist who starts talking about the Epistemic Communities, defines these as networks of professionals with recognized experience and competence in a particular field. Therefore, and due to their specialized knowledge, Epistemic Communities have sufficient 'legitimacy' in the area of policies within a given field (p. 108). Maldonado (2005) adds that we use the term Epistemic Community to refer to a concrete union of individuals who share the same vision about specific problems, that is to say: an episteme (a common belief, a knowledge).

Haas (1992), in its basic approach, gives a character to the professionals that conform in networks and EC, of "professionals with recognized expertise and competence in a particular domain or issue-area" (Haas, 1992, p. 4). To this, Molina (2016) adds that with this expertise and competence, the professionals that make up the EC claim authority in this area or thematic area, based on shared political beliefs and objectives. I will analyze in later paragraphs how we can understand this *expertise* and its broad implications, since it would not be left in the simple fact of having had some practice in some area of knowledge, technology or some other vital issue that is simply raised as *experience*, as some authors translate the term into Spanish.

Although the concept of Epistemic Community comes from the field of international relations, Maldonado (2005) points out that Haas and his group developed this concept mainly on issues such as the control of nuclear weapons, the protection of the ozone layer, the formulation of free trade agreements and international aid regimes in the area of food. This breadth of influence is also noted by Loblöová (2018), who agrees that EC is a concept established from the study of international relations "but can not explain policy change at the domestic level" (p. 160). Thus, Orozco Restrepo (2016) adds, in the same sense, that these professionals who researchers and policy makers who converge and articulate in networks or interest groups, promote their vision of the world, influencing states, multilateral organizations and transnational individuals.

When we discuss the notion that is given to the concept of EC and identify and understand how it is that these networks of experts configure and redefine the policies, within the current World Order, the diverse interests and global and particular operating mechanisms of nations that make up, authors such as Molina (2016) point out that the perspective under which the degree of influence of the EC is assumed, implies that control over and through knowledge and information is an important dimension of power. For many years these groups of political power have been in the dilemma "to deal with a broader range of issues that they were traditionally accustomed to have turned to specialists to ameliorate the uncertainties and help them understand the current issues and anticipate future trends" (Haas , 1992, pp. 12-13), but with the conception and assignment of specific tasks of the EC, the decisions that the states take under their shelter nationalities are formalized and validated under the prestage that EC have in their immediate and future contexts.

In discussing the above, it would be worth highlighting the fact that the processes and the definition of policies are directly connected to certain agents and groups close to the power hierarchy and these, in turn, are subjects with particular histories and circumstances, with personal decisions, circumstantial facts and in general events that are part of the subjects' lives (Maldonado, p. 109). Although it can be seen that, regardless of whether the EC is convened for political reasons, they can

achieve their points of view and move towards objectives different from those initially envisaged by political decision makers (Haas, 1992, cited by Molina, 2016).

Consistent with previous ideas, Haas (1992) points out how modern nations have shown interest in expansion, professionalization, and a certain level of deference to the 'knowledge elite'. Löblová (2018) declares how in the past two decades "our world has become one where expert input is the norm" (p. 161). Similarly, Barry Barnes and David Edge (cited by Haas, 1992) have argued that, in modern societies, "science is near to being the source of cognitive authority: anyone who would be widely believed and trusted as an interpreter of nature needs a license from the scientific community" (p. 11). Haas concludes that many people and institutions trust the scientific community because they share the certainty that the scientific method can make public policy making more rational.

Within those possibilities of influence that the national states give with their confidence and deference to the EC, it should also be mentioned how these are feasible to institutionalize their influence and insinuate their points of view in broader international policies, by consolidating a broad level of bureaucratic power within the aforementioned national administrations and international secretariats (Haas, 1992). This is clear when we see how the work of the EC has increasingly been extended to studies on groups involved in additional problems of increasing global concern (Adler and Haas, 2009), among which mention urgent situations to attend, such as Acquired Immunodeficiency Syndrome (AIDS), deforestation, climate change and drug trafficking, among others.

Thus, to conclude this section, I can point out that the essential task that has been assigned to the EC, from various areas of knowledge, has been to undertake research programs that take into account from the beginning, the value that their ideas will have and contributions in decision making, under the understanding and establishment of patterns that contain the dialectical relationship between theory and facticity, that is, contribute to engender realities from the diffusion, permanence and adaptation to the changing environment faced by the decision makers (Orozco Restrepo, 2016).

Characteristics and functions of the Epistemic Communities

The EC has, from its conception, a *reflexivist approach*, a term that comes from the critical theory of international relations and which implies a critical vision of materialism and rationalism of the mainstream, and entails a methodological proposal about the different research programs on all in security studies, showing how they have affected the realities of States, intergovernmental organizations and transnational forces (Orozco Restrepo, 2016). The fact of establishing a reflective research program implies that it must be progressive, that is, that new discoveries on family cases of diverse areas such as security, international economic policy or the environment are generated (Adler and Haas, 2009).

This reflective approach, based on its critical vision, could also be applied to fields such as Higher Education, since the researchers who work in this field, according to El-Khawas (2000, cited by Maldonado, 2005) have had an explicit mandate to investigate and understand higher education in order to improve it. In fact, in recent years the notion of EC has begun to be used in Latin America, according to Molina (2016), to study security policies of global scope, to establish social policies promoted by international technical and financial assistance agencies, adopted and adapted by national states; and, as already mentioned, but to a lesser extent according to Molina, in studies on the role of experts in the definition of policies in Higher Education.

Maldonado (2005) refers to the seven models of use of research according to the classic planning of Carol Weiss (Nisbet, 1998, cited by Maldonado, 2005): *Linear Model* (which assumes that basic research leads to applied research, following its development and implementation); *Problem Resolution Model* (in which the research identifies the knowledge needed to direct an action); *Interactive Model* (includes researchers and decision makers in a constructive and collaborative dialogue); *Political Model* (research is used to justify a particular policy); *Tactical Model* (the need for investigation is used as an excuse to delay a decision or action); *'Illuminator' model* (where research ideas are projected and scenarios and solutions are imagined); *Intellectual Model* (the research activity broadens the horizons and increases the quality of the public debate), but clarifies that the concept of the EC can not be stay into only one of these models but at certain moments of its work and development, according to the needs and tasks assigned, can incorporate characteristics of each one or several of them.

Thus, under this approach and heterogeneous research models, the EC shares at least four aspects:

1. Certain beliefs and principles that are the basis for some of their actions,

2. Professional judgments,
3. Notions of validity, and
4. Common political agenda (Stone, 1996, cited by Maldonado, 2005).

In congruence with the previous paragraph, Haas (1992), Maldonado (2005) and others, state that EC have at least seven characteristics that define them:

- a) Common agenda under coinciding points in the research agenda.
- b) It is integrated by networks. An epistemic community is a network made up of other networks.
- c) System of shared beliefs and values.
- d) Compact size that privileges the academic prestige, the ability of the members to influence within their disciplinary field and their capacities to extend their influence and relate to important actors in the definition of policies.
- e) Give more weight to informal than formal relationships.
- f) Prestige and academic credentials as the most important capital that allows it to be distinguished from other networks or groups.
- g) Professional diversity Professional identity is not the main integrating element in an epistemic community.

Taking into account such characteristics, Adler (1992, cited by Maldonado, 2005) explicitly states that, under these premises, EC should not be confused with a profession as it crosses professional boundaries.

As I mentioned previously, the EC emerge from the field of international relations and subsequently participate in other areas of knowledge, including higher education, and its essential task is to participate in the development of national state policies and influence for its start-up. In such a way that the process to arrive at the formulation of policies, implies the following functions:

- To elucidate cause and effect relationships and provide advice on the possible outcomes of various courses of action;
- To shed light on the nature of the complex interrelationships between the problems and the chain of events that may arise both from lack of action or the institutionalization of a particular policy;
- To help define the interests of a state or factions within it; and
- To help formulate policies. (Molina, 2016).

Within this process, it is necessary to break down the moment in which the EC helps the States to identify their interests, defining and / or framing the issues of collective debate and then proposing the specific policies and identifying outstanding negotiation points (Molina , 2016); for this, it is also important that the EC exert its influence to limit the range of political controversy around a matter, the definition of the interests of States and the setting of standards (Adler and Haas, 2009).

The favorable impact of the EC in the fulfillment of such functions may occur if they are presented:

- Identification of EC membership and beliefs based on principles and causes shared by its members;
- Location of their activities and the demonstration of their influence on decision-making at different points in time;
- Identification of the credible alternative results that were executed as a result of their influence; and
- Postulates with alternative explanations for the actions of the decision makers. (Haas, 1992, cited by Molina, 2016).

Adler and Haas (2009) warn that, in order to fulfill such functions and represent an important nucleus of academic-intellectual influence in the formulation of policies, the EC should not be confused with a new hegemonic actor that acts as the origin of the political and moral direction in society. The epistemic communities are not in the business of controlling

society. The focus of these should be merely instrumental and their period of operation should be limited to the time and space that are jointly defined by their members and decision makers, starting with the problem and its solutions. As they emphatically point out: EC are neither philosophers, nor kings, nor philosophers-kings (Adler and Haas, 2009). EC do not control societies, due to their very remote scientific nature or the political or militant, but they represent an important value for them, as Haas (1992) states: "Epistemic communities need not be made of natural scientists; they can consist of social scientists or individuals from any discipline or preference who have a strong claim to a body of knowledge that is valued by society" (p. 16).

What matters is that the members of the EC, as it was already reiterated with the previous idea, are professionals respected in their own disciplines and have the capacity to influence those who compose it; but also that they must demonstrate the capacity to extend their direct or indirect influence with an always expansive pattern, eventually reaching key actors in the process of policy coordination (Adler and Haas, 2009). After all, the factors that influence the presentation of changes in the enunciation of policies based on the research carried out by the EC are: "Knowledge; causal and principled beliefs" (Haas, 1992, p. 6).

As Haas (1992) specifies, decision makers may have different incentives and reasons to consult the EC, some of them with more political motivations than others. The implication for these incentives or reasons to arise can be:

- First, following a shock of crisis, Epistemic Communities can elucidate the cause-and-effect relationships and provide advice about the likely results of various courses of action. In some cases, they can help decision makers gain a sense of who the winners and losers would be as the result of a particular action or event.
- Second, Epistemic Communities can shed light of the nature of the complex interlinkages between issues and on the chain of events that might proceed either from failure to take action or from instituting a particular policy.
- Third, Epistemic Communities can help define the self-interests of a state or factions within it. The process of elucidating the cause-and-effect relationships of problems can in fact lead to the redefinition of preconceived interests or to the identification of new interests.
- Fourth, Epistemic Communities can help formulate policies. Their role in this regard will depend on the reasons for which their advice is sought. In some cases, decision makers will seek advice to gain information which will justify or legitimate a policy that they wish to pursue for political ends. An epistemic community's efforts might thus be limited to working out the details of the policy, helping decision makers anticipate the conflicts of interest that would emerge with respect to particular points, and then building coalitions in support of the policy. (p. 15).

To conclude this section it is important to point out that, as Haas (1992) indicates, the EC ethical standards are based on its principled approach with respect to the subject in question, rather than just in a code professional. Such standards should be the support in practice to reach the degree of influence expected even in "highly certain areas of routine policymaking" (Löblová, 2018, p. 160), which then leads to a reconceptualization of the uncertainty that initially the EC is raised, an essential demand that decision makers and policy makers make to experts.

Expertise of the Epistemic Communities and the interpretation of the reality that they propose

Expertise, according to Haas (1992), is an essential characteristic of the professionals that make up the EC. As I mentioned, it can not be translated simply into 'experience' in a specific field of study, but in specific it is more related to a high level of expertise and knowledge. Before entering to discuss these implications for the professional, the Professor Researcher in the specific case of this paper, it should be noted that aspects such as leadership, management skills, effective political discourse and assertiveness are left aside, not necessarily because they are not important in the profile of this professional as part of their skills, which are regularly requested by governments and their institutions for public policymakers. As I mentioned in previous paragraphs, the characteristics of the EC and its members are very well defined but include other areas.

As Stone (1996, cited by Maldonado, 2005) mentions, it is very pertinent to nominate a network of experts to a EC, instead of the denomination 'group', since knowledge is a central aspect of power from their perspective. Recognizing the specialized knowledge they possess contributes to a more balanced analysis regarding their contribution in a field of studies (Maldonado, 2005), in which even they may have been precursors.

Haas points out (1992) that, in the second part of the 19th century, scientific rationality began to prevail over the alternative paradigms of knowledge as a model for decision making in science, "although it did not reach its peak until about fifty years later, when logical positivism and the ideas of the Vienna Circle were embraced and the entry of White-Coated professionals into the public policy process became more widespread" (p. 8). Although, as pointed out by Molina (2016), it was from the Social Sciences, in the 70s of the last century, that the role of experts and professionals in economics and social policies began to be problematized. Around that period, Molina continues, a process of profound disenchantment with the scope of science as a means to improve life in society took place, then distrust and strong criticism of the experts began to prevail. In response to these criticisms, in those years new matrices were emerging to analyze the diverse relationships between ideas, experts and policies, as well as to review the influence of expert knowledge on the configuration of political institutions and public policies and, above all, the processes that consolidate these experts as relevant social actors.

Continuing with this idea, we can emphasize the central assumption of critical approaches that indicates that professionals / experts are not only bearers of 'technical knowledge', but epistemes, paradigms, the referents they share and transmit combine elements cognitive, normative and programmatic (Molina, 2016). In a broad sense, 'knowledge', as defined by Haas (1992), is "the communicable mapping of some aspect of the reality reality by an observer in symbolic terms" (p. 21).

The English sociologist Terry Johnson (1995, cited by Molina, 2016) argues that the recognition of professional expertise derives more from the needs of legitimacy of the State itself than the esoteric knowledge and abstract knowledge that professionals develop and put into play. Thus, this author proposed as a postulate that the pre-eminence of the knowledge of experts is a condition of possibility of the modern State. In other words, the success of scientific communities, as the EC claims to be, for the construction of a social reality with universal validity, is a consequence of the official recognition of the members of these as experts. The government depends on the neutrality of expert knowledge to make governable the social reality, concludes Johnson (1995, cited by Molina, 2016).

In this triangulation with the social realities that are sought to be made 'governable' through the expert influence of the EC, it is necessary to return to the conception that Haas (1992) makes of 'episteme', as a dominant way of looking at social reality, a set of symbols and references, expectations and intentions shared by specific collections of individuals who share a vision of the world that delimits, for its members, the adequate construction of social reality. Haas suggests that networks of experts learn models and patterns of reasoning, and with this assumes, with Berger and Luckman (2001, cited by Haas, 1992), that reality is socially constructed, which implies that our concept of reality is mediated for the previous assumptions, expectations and experiences.

In this way, the EC provides consensual knowledge, but does not generate 'truth',

The epistemological impossibility of confirming access to reality means that the group responsible for articulating the dimensions of reality has great social and political influence. It can identify and represent what is of public concern, particularly in cases in which the physical manifestations of a problem are themselves unclear. (Haas, 1992, p. 23).

What the EC does to provide such consensual knowledge is to construct frameworks for analysis and interpretation based on evidence (Haas, 1992), which is what decision makers mainly require (Davies, 2012; Wilsdon, 2014; cited by Löblová, 2018). This is how effective frameworks could be formed that can ensure that problems are seen in a specific way, so that favored ideas seem common sense, and disadvantaged ideas, as unthinkable (Molina, 2016).

Conclusions: What the probable success or failure of the Epistemic Communities depends on

As I reviewed in previous sections, the epistemes that the EC builds and that could become established as dominant, based on the recognition of their expertise, contribute to explain the choice and persistence of policies, frame policies and affect their institutionalization (Molina, 2016). Dunlop (2013, cited by Molina, 2016) adds that the tasks of the EC can be successful insofar as they make their visions prevail and that they are related not only to the epistemic and institutional resources they have but also to the perspicacity policy of its members to persuade decision makers, and navigate successfully in government machinery.

Bearing in mind that the policy formulation and implementation process presents four main steps: policy innovation, dissemination, selection and persistence (Adler and Haas, 2009), one of the main factors that will influence the time that an EC maintain its influence will be the degree of consensus reached among its own members, when it loses its consensus,

its authority will decrease and the actors in charge of making political decisions will pay less attention to their advice. Other factors that will have a possible effect on the authority, influence and even permanence of the EC, are economic, political and other crises, which very likely, as a consequence, will lead the political decision makers to seek advice of new groups of experts.

This idea allows us to give an account of what the EC would require for its permanence and success in fulfilling the tasks for which they were created. As can be seen throughout this paper, the work with groups of researchers (Academic Teams) and scientific communities with influence on the formulation of policies (Epistemic Communities) has been in HEI and CCTI still not very effective. The subjects for the conformation of any of these two work teams exist; the expertise and broad knowledge, and the prestige of them is present and recognized in different ways, but it is a fact that one would have to work internally in such research groups or scientific communities, reaching a solid consensus that allow them to influence the various levels of decision makers and educational policy makers, starting with the closest, that is, at the institutional domestic level, then at the state level, and then try to do it at higher global levels.

The inicial idea that I proposed as a guide to the present writing continues in a wait-and-see channel. I believe it is feasible to link in Teacher Training Colleges and Institutions educational policies with their reality through the influence of the EC; as I said, this would be extremely favorable to find -and validate- the first ways to meet the meanings, the concordance and the subsequent effective implementation, in the short or medium term, of these policies in the daily practice of these institutions, but the experience with the Academic Temas shows that the success of these enterprises will be segmented, dependent on the internal impulse of education professionals, which in the case of the Epistemic Communities, should have a fine listening receiver, institutional or governmental, that understands the value of having these for undertake and configure new ways to enunciate their policies that become truly applicable in daily practice.

References

- [1] Adler, E. y Haas, P. (2009). Conclusión. Las comunidades epistémicas, el orden mundial y la creación de un programa de investigación reflectivo. *Relaciones Internacionales*, núm. 12, octubre de 2009. GERI – UAM. Disponible en https://www.researchgate.net/publication/277032000_Conclusion_Las_comunidades_epistemicas_el_orden_mundial_y_la_creacion_de_un_programa_de_investigacion_reflectivo_en_International_Organization_Vol_46_No_1_Winter_MIT_Press_1992_P_367-390
- [2] Haas, P. (1992). Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, Vol. 46, No. 1, Knowledge, Power, and International Policy Coordination. (Winter, 1992), pp. 1-35. Disponible en <http://links.jstor.org/sici?sici=0020-8183%28199224%2946%3A1%3C1%3AIECAIP%3E2.0.CO%3B2-%23>
- [3] Löblová, O. (2018). When Epistemic Communities Fail: Exploring the Mechanism of Policy Influence. *The Policy Studies Journal*, Vol. 46, No. 1.
- [4] Maldonado Maldonado, A. (2005). Comunidades epistémicas: Una propuesta para estudiar el papel de los expertos en la definición de políticas en educación superior en México. *Revista de la Educación Superior*, Vol. XXXIV (2), No. 134, Abril-Junio de 2005, pp. 107-122. Disponible en https://www.researchgate.net/publication/28087005_Comunidades_epistemicas_Una_propuesta_para_estudiar_el_papel_de_los_expertos_en_la_definicion_de_politicas_en_educacion_superior_en_Mexico
- [5] Marier, P. (2008). Empowering Epistemic Communities: Specialised Politicians, Polici Experts and Policy Reform. *West European Politics*, Núm. 31, pp. 513-533. Disponible en <http://dx.doi.org/10.1080/01402380801939800>
- [6] Molina, C. (2016). La noción de comunidades epistémicas: contribuciones al estudio de los expertos en el estado y al análisis de las trayectorias académicas y las redes intelectuales en la Universidad Nacional de Cuyo. Actas 2016 I Jornadas Nacionales de Investigación en Ciencias Sociales de la UNCuyo. Perspectivas actuales en la investigación en ciencias sociales: problemáticas, enfoques epistemológicos y abordajes teórico-metodológicos. 25 y 26 agosto 2016. Disponible en <http://bdigital.uncu.edu.ar/9957>

- [7] Orozco Restrepo, G. (2016). Comunidades epistémicas en los estudios de seguridad y la interpretación del orden mundial. *Desafíos*, 28(1), pp. 335-369. Disponible en <http://dx.doi.org/10.12804/desafios28.1.2016.08>
- [8] Rodríguez Lares, J. J., Soto Soto, O. C. y Alvarado Cabral, J. J. (2017). La investigación educativa como eje de organización, desarrollo y productividad de los Cuerpos Académicos. Ponencia presentada en el 1er. Encuentro Nacional de Cuerpos Académicos, Normal de Sinaloa, diciembre 2017.